

SPECIAL EDITION
WEEKLY LOG

January 1987

Published by General Dynamics Convair & Space Systems Divisions

**ATLAS AND CENTAUR AT
CAPE CANAVERAL**

***A Picture-Perfect
Boost for
America***

"Flawless; picture-perfect; beautiful; and spectacular" were some of the terms used by national media and government spokespersons to describe the December 4, 1986, launch of Atlas/Centaur 66 from Launch Complex 36B at Cape Canaveral, Florida. In a year marred by adversity for U.S. space programs, the reliable Atlas/Centaur ended 1986 on a positive note for NASA. "This success gives the agency a good jump-start as it moves into 1987," said NASA director of expendable vehicles, Charles Gay.

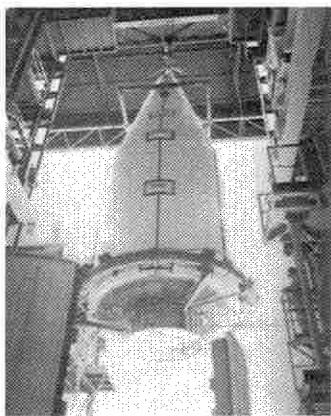
Originally scheduled to launch a Fleet Satellite Communication (Fltsatcom) spacecraft on May 22, 1986, AC-66 was postponed eight times before taking off. Although NASA officials believed the vehicle was flightworthy from the start, the failures of other space launches in 1986 caused it to be subjected to continued scrupulous review. "We went through the whole vehicle in great detail," said Gay. "We had to take whatever measures were necessary to make sure we wouldn't have any problems." Despite the delays, once verification was completed, AC-66 was on its way.

At 10:49 a.m. EST on December 4, the extensive prelaunch operations began in the blockhouse and on the pad at Cape Canaveral's Launch Complex 36B. The scheduled events went as planned, and at 6:24 p.m. the tower was rolled back in preparation for the 9:04 p.m. scheduled liftoff.

As spectators as far away as 150 miles along the Florida coast anxiously awaited the launch, a minor telemetry problem with the

satellite delayed the final countdown for 26 minutes. At 9:30 p.m., AC-66 blasted off the pad, lighting up Cape Canaveral and the surrounding countryside.

The first Atlas/Centaur launch since the summer of 1985, AC-66 successfully transported the sixth in a series of Fltsatcom spacecraft built by TRW, Inc., and launched by General Dynamics. These satellites comprise the spaceborne portion of a Navy, Air Force, and Department of Defense system that enables communications among U.S. Navy aircraft, ships, submarines, and ground stations; Strategic Air Command aircraft and ground stations; and presidential command networks. Each satellite (5,060 pounds at liftoff) is deployed in a geostationary orbit over 19,000 miles above the equator, where it provides earth coverage for 23 channels on its radio frequencies.



Spacecraft raised for AC mating.

The \$125 million Fltsatcom Flight 7 that AC-66 boosted also is carrying an experimental extra-high-frequency package as a test bed for terminals being developed for future-generation communications systems. The Flight 7 mission is also important since the four Fltsatcom satellites already operat-

ing in orbit have outlived their five-year design life (the first being put in space by AC-44 in 1978). In the first half of 1987, Space Systems Division is scheduled to launch the remaining two Fltsatcom satellites to complete the military communications system.

The successful launch of the spacecraft by AC-66 was particularly important to Space Systems Division in light of the upcoming Medium Launch Vehicle (MLV) award due to be announced in mid-January 1987. Several government officials as well as representatives from commercial communications companies were on hand for the launch to observe and to discuss technical capabilities of Atlas/Centaur.

The Space Shuttle Challenger tragedy in January 1986 forced NASA officials to rethink a policy that focused on a single system of launching satellites, said Alan Lovelace, Space Systems Division Vice President and General Manager.

"That event has brought the expendable launch vehicle business back from extinction," Lovelace said. "It put a new emphasis on a product that we haven't emphasized for several years."

The MLV project "would be a major program for us," Lovelace said, "not only in terms of the contract but also in terms of the other business that flows from that."

"It would really put San Diego on the map as one of the centers for space delivery and space hardware," he said. "That would attract



In the calibration lab of Hangar H, Kent Lansing, senior electronic technician (standing), and O.D. Brown, group leader, ensure that all required equipment and tooling meet stringent requirements. During launch exercises, they stand by in the blockhouse to meet calibration needs should they arise.

an awful lot of other support business to San Diego and enrich the technical base."

Congratulations to the entire San Diego and Eastern Test Range Atlas/Centaur team on the success of AC-66. Air Force Space Command spokesman Colonel John Booth said, "This was a badly needed step for the country, DoD, and NASA. This gives our nation a little more confidence that our space program is back in gear."

Atlas, Centaur, and Company

During the past three decades Atlas and Centaur boosters have reliably served the armed forces and NASA in the development and successful operation of America's space programs. Atlas, either alone or teamed with various secondary boosters (including Centaur), has gained the reputation for being able to deliver the goods. In 1964, *Time* magazine said that the Atlases "... took off from Cape Kennedy as routinely as a commuter leaving for the railroad station."

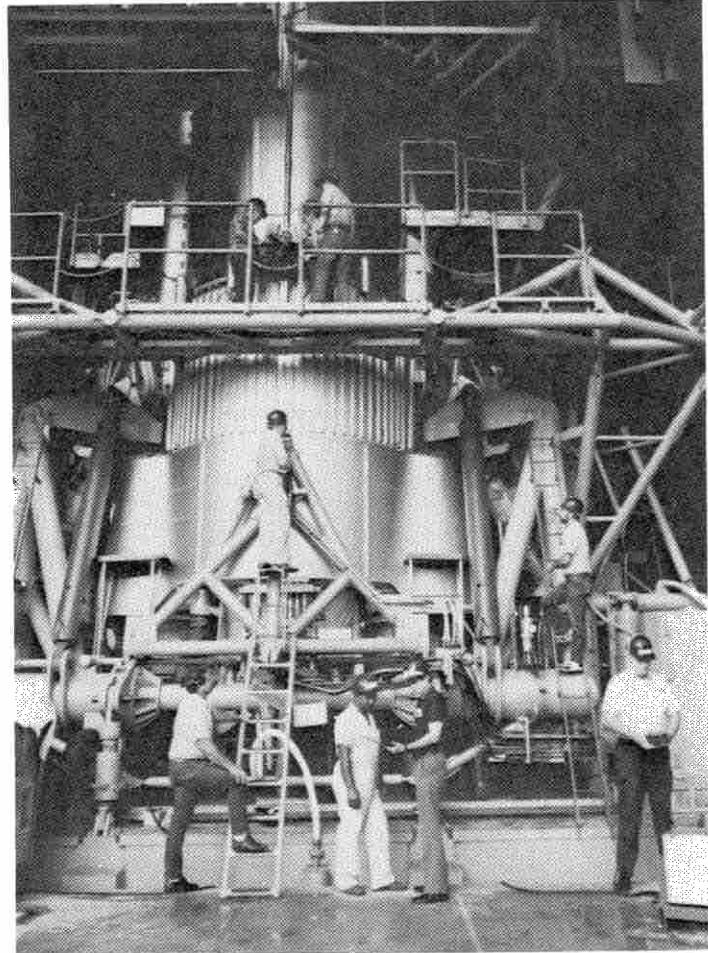
The dependable Centaur, using the combined liquid oxygen and hydrogen propellant, began its long career in 1966 when AC-10 carried Surveyor 1 on a very accurate trajectory toward the moon. Centaur has gone on to launch every American deep-space probe.

Today, Atlas and Centaur continue to play vital roles in the future of America's space programs.

The list on page 3 provides a synopsis of Atlas and Centaur launches from Cape Canaveral.



Human Resources employees meet the everyday needs of personnel issues and base support. From left are Debbie Henry, HR assistant, Pat Moore, executive secretary to base manager, John Mazza, HR chief, Pat Whisenant, HR assistant, and Frances James, HR analyst.



The Atlas/Centaur team works diligently on AC 66 at Launch Complex 36B. Making preflight preparations are (top, from left) Bob Baxter, Jerry Leonard, and Dave Michalsky. (Middle) Don Builler and Marv Tilley. (Bottom) Bill McClure, George Thorton, Ralph Howington, and Jim Seymour.



Hangar K's Tom Barrett runs a drill press in the production of one of the 16,000 Atlas and Atlas/Centaur parts that have been produced at the Cape for airborne hardware. Machine shop supervisor Don Gowin said, "We have gained such a reputation for excellence that we were recently asked by Aerospace Corporation to repair payload handling fixtures for the Air Force."

"We have been handed the product of thousands of other people. It gives us an added sense of responsibility. Hundreds of thousands of manhours have gone into the product. It all culminates here at the Cape — the gravity of our responsibility is real to us."

Dan Sarokon — Base Manager



Congratulating one another after the successful launch of AC-66 are (from left) Lee Buss, Atlas/Centaur chief engineer, Burt Sherwood, mission manager, and Dennis Dunbar, Atlas/Centaur program director.

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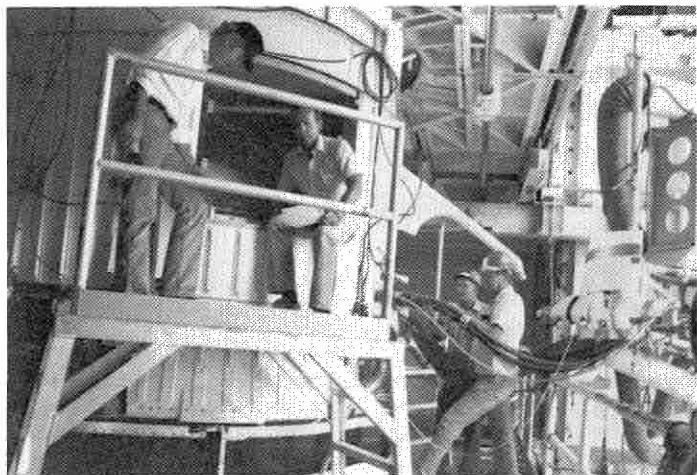
SPACE SCIENCE Physics and Astronomy

Mission name	Dates	Launch vehicle
OGO (Orbiting Geophysical Observatories)	1966-72	Atlas-Agena
AOA (Orbiting Astronomical Observatories)	1966-72	Atlas-Agena;Atlas/Centaur
HEAO (High-Energy Astronomy Observatories)	1977-79	Atlas/Centaur

International Space Science

HELIOS (German) 1974, -76 Titan III/Centaur

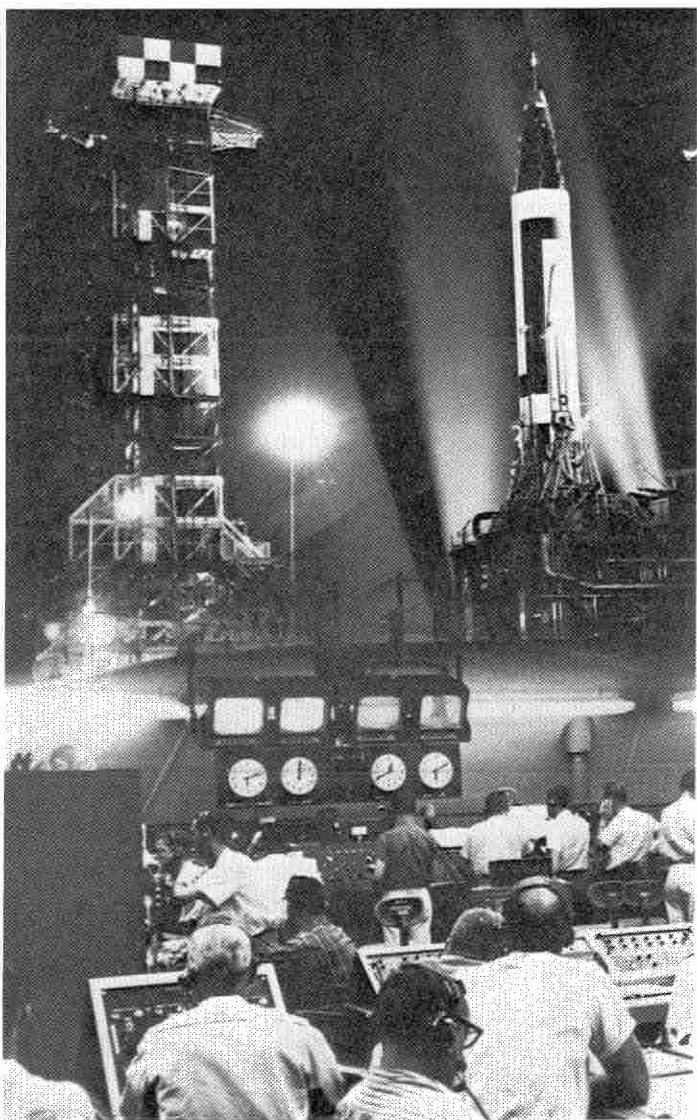
Lunar and Planetary		
Pioneer & Pioneer Venus (Interplanetary)	1972-78	Atlas/Centaur
Ranger	1961-65	Atlas-Agena
Surveyor	1966-68	Atlas/Centaur
Lunar Orbiter	1966-67	Atlas-Agena
Mariner (Venus, Mars, Mercury)	1962-73	Atlas-Agena;Atlas/Centaur
Viking (Mars)	1975	Titan III/Centaur
Voyager	1977	Titan III/Centaur



Checking out umbilical cord connections on the Centaur are (from left) Lee Cox, inspector; Richard Saywell, electrical technician; James Matthews, senior launch service technician, and J.K. Moore, senior launch service technician. These employees' combined years of service provide a base of experience to ensure successful mission operations.

COMMUNICATIONS Operational Systems

Intelsat (International Telecommunications Satellite Organization)	1971-85	Atlas/Centaur
Fltsatcom (U.S. Fleet Satellite Communications Spacecraft)	1978-87	Atlas/Centaur
COMSTAR (U.S. Domestic Communications Satellites)	1976-81	Atlas/Centaur



SPACE APPLICATIONS AND TECHNOLOGY Launch and Space Vehicle Development

Centaur	1962-66	Atlas/Centaur
FIRE (Flight Investigation of Reentry Environment)	1964-65	Atlas-X259
Titan III/Centaur	1974	Titan/Centaur

Applications Technology

ATS (Applications Technology Satellites) 1966-69 Atlas-Agena;Atlas/Centaur

MANNED SPACE FLIGHT

Mercury

Suborbital: Big Joe, MA-1, MA-2 (Unmanned Spacecraft Tests)	1959-61	Atlas 10-D/Mercury-Atlas
Orbital: MA-5 (Chimp "Enos")	1961	Mercury-Atlas
Orbital: MA-6 (Glenn)	1962	Mercury-Atlas (Friendship 7)
Orbital: MA-7 (Carpenter)	1962	Mercury-Atlas (Aurora 7)
Orbital: MA-8 (Schirra)	1962	Mercury-Atlas (Sigma 7)
Orbital: MA-9 (Cooper)	1963	Mercury-Atlas (Faith 7)

Gemini

Gemini (Target Vehicles)	1965-66	Atlas TLV
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On June 11, 1957, blockhouse personnel stood by for the final countdown of Atlas 4A, the first Atlas launch.



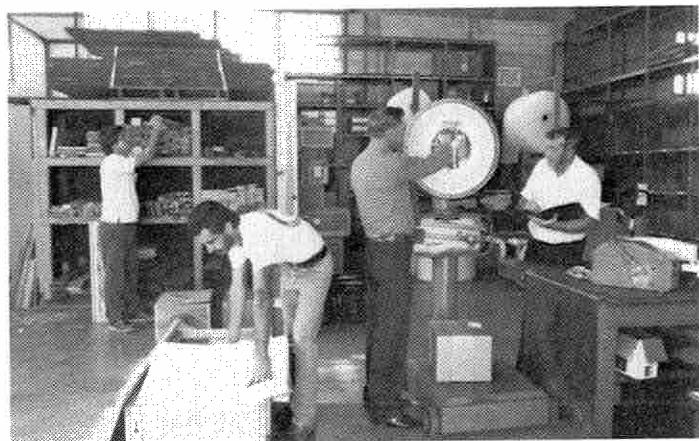
Final mechanical inspector Jim Garrett checks out the thread tolerance of a bolt — one of the many important inspection procedures required to ensure mission success. A 28-year General Dynamics veteran, Jim said that one of his most memorable experiences was viewing the first successful launch of an Atlas/Centaur.



Tom Stellwag, machinist, operates a lathe to make a precision pin. In the machine shop in Hangar K, craftsmanship is required to meet routine and urgent needs. "I like working at the Cape," Stellwag said. "The challenge is here and it makes my work interesting."



Virgil Duduit, blockhouse monitor (front left), and Sy Baker, site manager of Atlas/Centaur launch operations (and launch conductor), go through one of the many countdown exercises required prior to launch.



The Contractor Storage Building is a busy area. Traffic, receiving, spares warehousing, shipping, and dispatching are some of the functions that go on in this complex. Shown above are (from left) Richard Sansing, material support analyst, Herb Vitt, material processor, Guy Callon, dispatcher, and Bob Noe, supervisor. "We stay motivated in our group," said Bob Noe, "because we realize that we support the launch crew at the pad and we know that we are part of the team."



***The Grand Treatment.** These employees and spouses were the motivational group sent to the Cape. They received a guided tour of the facilities before they viewed the launch of AC-66. Standing at the Mercury 7 monument are (front, from left) Teresa Tanalski, Jeff Reddekopp, Lela Reddekopp, Linda Williams, Monica Perez, Alex and Mary Catania (tour guests), Dan Shoemaker (ETR tour guide), and Lesa Royle. Second row, Dave Swanson, Frank Munson, and Jeff Williams.*



In the midst of a busy schedule, these Space Systems employees at ETR donate their time to help needy families in the community at Christmas. Preparing presents are (from left) Virginia McKay, Howard Biegler, Jeff Hartnett, Barbara Hubinger, James Matthews, and Alfred Grace.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330.

*Managing EditorCal Samuels
ProductionNancy Mumford
Design/LayoutPeter Urban
TypesettingDianna Rich*

The Centaur bay provides close working relationships for the ETR employees. From left are Jerry Leonard, Robert Baxter, and Dave Michalsky.

CONVAIR

WEEKLY LOG

January 12, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



MD-11 Program Given Go-Ahead

Fuselage Production to Run Through the 1990s

Douglas Aircraft Company announced on 30 December 1986 that it was going into production on the MD-11 aircraft. Douglas has firm orders for 52 MD-11s, and options for 40 more, from 12 customers. Among the major airlines that have placed orders so far are Alitalia, British Caledonian, Korean, SAS, Swissair, Thai International, and Varig.

Convair will produce the fuselage sections for the MD-11, as it has done for the DC-10 and KC-10 aircraft since 1970. The MD-11 should extend Convair fuselage production through the 1990s.

Douglas forecasts the delivery of 350 MD-11s by the year 2000. The contract for the first 200 shipsets of fuselages is now under negotiation. Convair will de-

liver the first MD-11 fuselage to Douglas in the summer of 1988. Production is expected to reach a rate of three or four fuselages per month in late 1991. MD-11 fabrication will begin in May or June of this year, with assembly of the first fuselage at the end of 1987. Some 1,400 additional employees will be needed for MD-11 production, peaking in 1991.

The MD-11 is an improved version of the DC-10 commercial airliner. Its longer fuselage will be produced by adding two short fuselage sections, delivered to Douglas separately, in addition to the three major fuselage sections we now deliver on the DC-10. Four versions of the MD-11 are being offered for sale.

Douglas is negotiating with 17 other potential MD-11 customers, including four U.S. airlines, and expects to be able to announce additional sales shortly.

Convair has three KC-10 fuselages remaining to be delivered to Douglas, and will produce approximately 10 for the DC-10, the first of them now in assembly, between KC-10 production and the first MD-11 fuselage.

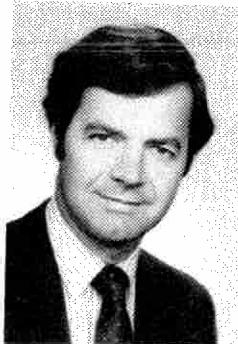
Space Systems Staff Promotions Announced

L.E. (Roy) Bennett was recently appointed division vice president - Material. Roy started with General Dynamics in 1966 at the Quincy Division, and joined Space Systems in November 1985, when he assumed the responsibility for all Material functions.

D.E. (Don) Moore was appointed divi-

sion vice president - Quality Assurance. Don joined Space Systems in June 1985, to assume responsibility for the Quality Assurance department after a very distinguished career in government.

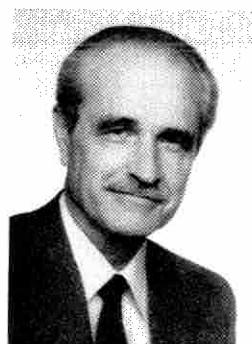
R.H. (Russ) Thomas also was appointed division vice president & program director-Titan/Centaur. Russ joined General Dynamics in 1956 and has held various positions in both engineering and program management.



Roy Bennett,
vice president —
Material



Don Moore,
division vice president —
Quality Assurance



Russ Thomas,
division vice president
& program director —
Titan/Centaur

New Security Procedures for Space Systems

On January 1, 1987, Space Systems Division officially assumed Industrial Security responsibility for Space Systems' classified contracts. Although much has already been accomplished to make this a smooth transition, the following issues must be addressed:

- All classified material relating to Space Systems contracts must be transferred to the Space Systems Classified Document Control System and renumbered. Over the next several weeks, auditors from Space Systems Industrial Security will be contacting employees to arrange for renumbering of this classified material. Prior to renumbering, Industrial Security requests that you review your classified holdings, including confidential, and turn in for destruction unnecessary copies of outdated and classified material which does not relate to an active classified contract.
- Following completion of an individual's transfer of classified material from Convair to Space Systems Mas-

ter Document Control (MDC), that Space Systems employee will conduct all classified document transactions with GDSS MDC or control stations. GDSS MDC is located in the Industrial Security Office, building 26, 1st floor, column A-24 (northeast corner). The Kearny Mesa Control Station is located next door to MDC. A second Space Systems control station is located in Century Park, building 1, adjacent to the lobby.

- All incoming and outgoing classified visits will now be processed through Space Systems classified visitor control. Please contact Carolyn Sanford, 75788, regarding any questions about classified visits.
- To facilitate proper handling of classified correspondence and mailing, Industrial Security has established a classified post office box. All Space Systems classified mail is to be addressed to General Dynamics/Space Systems Division, PO Box 85990, San Diego, CA 92138
- Space Systems Procurement buyers and program managers must submit Form DD254, Security Classification Specification Guidance, to Space Systems Industrial Security, MZ 21-7141, ATTN: Olivia Greer, prior to initiation of classified exchanges of work. Refer to the Buyers Security Handbook for further details.

GD Night at Disneyland

General Dynamics employees, families, and friends will have the opportunity to be among the very first to experience Disneyland's newest attraction, "Star Tours," during special parties on January 17-18, 24-25, and January 31-February 1. The Saturday hours (January 17, 24, and 31) are 6:00 p.m. to 1:00 a.m. Sunday hours (January 18, 25, and February 1) are noon to 9:00 p.m. Your tickets are good for any one of these evenings.

Ticket prices are \$10.50 for adults (ages 13 and over) and \$8.50 for children (ages 3-12) each day. The price includes free parking and unlimited use of the Magic Kingdom's more than 50 attractions (except arcades).

For information, call Jody at 28142.

State of the Division

Convair General Manager John McSweeny will present the division's year in review in his State of the Division address on Thursday, January 22, at the Hotel Inter-Continental Conference Pavilion. Cocktails are at 5:00 p.m., followed by dinner at 6:30. The Program commences at 7:30.

Tickets are \$9.95 for NMA members, \$17 for nonmembers, and are available from NMACC boosters. George W. Roos is executive host. For table reservations, call 75240.

Bulletin Board

Several Convair and Space Systems families had a brighter, merrier Christmas because they had someone who cared. Food, clothing, toys, money, and a Christmas tree were provided them by Contracts & Estimating, Production Engineering, and the employees at Viewpoint Plaza, building 2. **Lost & Found.** A lady's watch was found at Kearny Mesa. If you think it might be yours, call 73630.



A Pleasant Surprise. Point Loma Federal Credit Union CEO Ellen Schmall recently surprised Space Systems' Paul Korn by handing him the keys to a brand new 1986 Chrysler Le Baron, as Bernie Kulchin, division Vice President-Human Resources, looks on. Paul won the car through a promotional contest held by the credit union in celebration of reaching \$100 million in assets. Convair's Candice Shine and Gene Tarris also won vacations for two at the Frontier Lodge in Big Bear.

Do you have a new phone number or mail zone? Report any changes to Telecommunications, 73413, to help update their files.

October & November Retirees

Thanks and best wishes for a happy retirement to these employees who retired in October & November:

October Name (Classification)	Years of Service
Donald F. Becher Sr. ILS Engineer	5
John Cannizzaro Receiving Inspector	34
Betty L. Dower Financial Analyst	23
Charles F. Froehlich, Jr. Engineering Specifications	24
James Greenwald Sr. Financial Specialist	38
Bernice A. Hagler Aircraft Assembler	16
Frank E. Jarlett Sr. Project Engineer	29
Robert M. Meyers QA Engineering Specialist	30
Frances C. Novak Accounting Tech	30
Thomas F. Ryan, Jr. T&O Group Leader	30
Charles Vreeland Engineering Specifications	20
Margaret D. Williams Key Punch Operator	9
November	
Robert O. Benson Publications Tech Specialist	31
John D. Hash, Jr. Engineer	35
Donald L. Spencer Fire Lieutenant	35
David D. Zak Engineering Specialist	10

Employment

For the week ending January 2, Convair Division employment was 8,893; Space Systems Division employment was 2,702.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330. Managing Editor: Cal Samuels; Production Editor: Bruce Macdonald; Design/Layout: Bill Ferebee.

San Diego State Alumni — SDSU would like to know where you are in order to keep you informed of the new and exciting concepts at SDSU. Please complete this form and return to: B.J. Kuchta, MZ 36-1240.

Name	Year Graduated		
Street	Major		
City	State	Zip	Degree

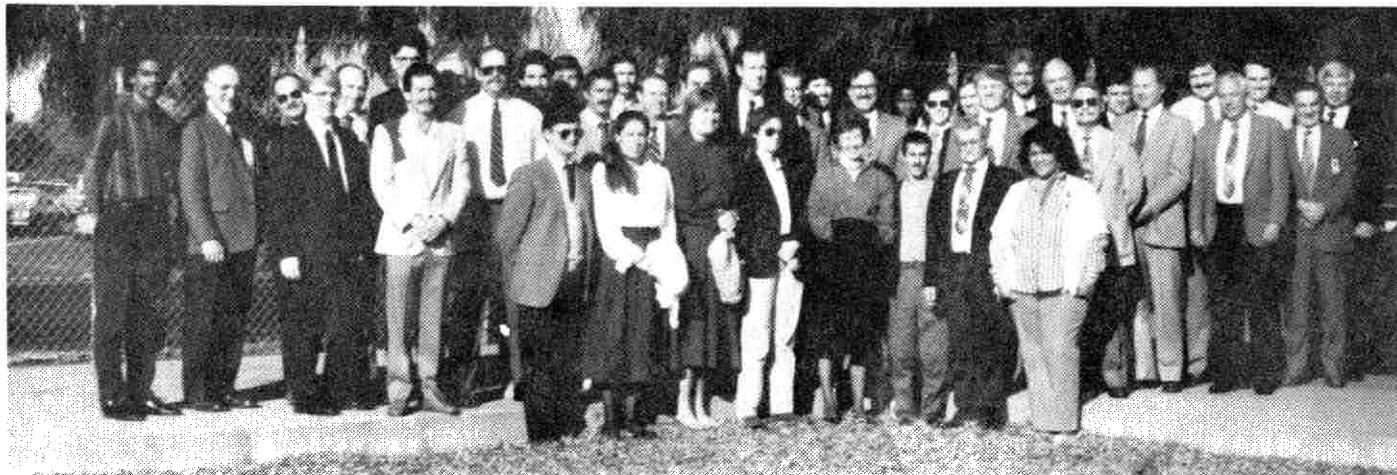
CONVAIR

WEEKLY LOG

January 19, 1987

SPACE SYSTEMS

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Convair Operations Employees of the Month.

Operations Recognizes Employees of the Month

At the recent Operations Employee of the Month quarterly breakfast hosted by Ken Lake, Convair division vice president-Operations, the following employees were recognized for their outstanding performance:

Fabrication & Production Engineering:

Norma Lockett, Charles Francis, Jim Cody, Kirk Hunley

Aircraft Programs:

Jack Brittain, Rick Mosberg, John Grier

Operations Administration:

Barbara Berlanga, Shirley Trepianer, Dave Swenson, Michael Hunter

Procurement:

Andy Johnson, Ben Wheat, Neil Sagebiel, Terry Green

Manufacturing Engineering:

Chester Owen, Jr., Marty Siebert, Brian Pearson, Dale Poling

Manufacturing/Material Control:

John Goncay, Mike Piro, Mike Beck, Ann Stonecipher

CM Manufacturing Product Line:

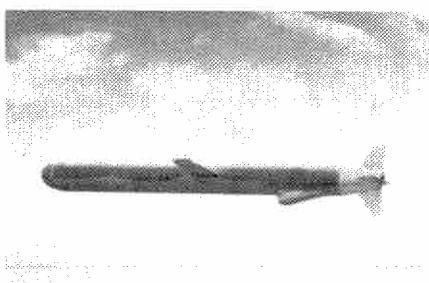
Darrel Milhoan, John Gallina, Tony Kennedy

Plant Services:

James Atkinson, John Stockdale, Hal Hendrickson, Joy Stockton

Advanced Programs:

Lymon Burr, Janice Marie Clark, John Gaus, Ronald Johnson



Tomahawk in flight after vertical launch.

Convair Recognized for Tomahawk Launch

In an official message sent to the Cruise Missile Program office, Rear Admiral L. Blose congratulated Convair for a recent successful Tomahawk launch.

"The USS Pittsburgh conducted the highly successful initial SSN 688-class vertical launch Tomahawk mission with a TASM missile. This on-schedule initial launch represents a major milestone in the

Vertical Launch Tomahawk program and demonstrates the capability to significantly increase the fire power of the submarine force in the anti-ship and land attack role."

"This major milestone in the SSN 688-class vertical launch Tomahawk was the result of the outstanding performance of a dedicated Navy and contractor team. The high degree of technical competence and project dedication of this team was a direct contributor to this highly successful mission."

State of the Division

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Bulletin Board

SSD check requests. All Space Systems Division check requisitions should be forwarded to accounts payable, MZ C2-7121, for processing. Questions? Call 77847.

Receiving a Degree? If you or someone in your department has recently received a degree, or will at the end of the semester, the *Weekly Log* would like to know. Please submit the name of the individual, his or her department, and the degree earned to the *Weekly Log*, MZ 11-1330.

Space NEO. All new Space Systems employees are required to attend New Employee Orientation (NEO). Attendees receive vital information about the organization, as well as required ethics, time card, and security training. Professional Staffing notifies supervisors of their new employees' orientation date. It is the supervisor's responsibility to ensure that the employees attend.

Contracts Specialist Needed

Convair's Contracts department has an urgent need for a contracts specialist with a technical background. The individual will act as focal point on all contractual matters, including formulation and negotiation of sales-related documents and proposals. A secret clearance is required.

If you are interested, please apply through the PEP program, referencing requisition 198-CONT.

Employee Benefits Office at Plant 19

An Employee Benefits Office will open January 20 at Plant 19, in the CRA site in building 3, column B-5. The office will be staffed each Tuesday from 7:30 a.m. to 9:30 a.m. All forms, change notices, assistance, etc., will be available on a one-on-one basis at that time.

CRA News

Winter Shape-Up Session

The winter Shape-Up session begins January 26, and preregistration is requested. Call 39921 for more information.

Fitness Program Accolades

The January issue of UltraSport magazine listed General Dynamics' fitness program among the top fifteen in the nation. Highlighted in the article were the 19,000-square-foot employee-built clubhouse and Missile Park. The magazine also cited the complete program, which offers a variety of exercise, recreational, and vacation opportunities.

Volunteers Needed for KPBS Pledge Drive

If you would like to volunteer to answer phones for the Friday, March 6 KPBS-TV pledge drive, please provide the information below and return it to *Weekly Log*, MZ 11-1330. The time of the pledge drive is from 6:00 to 11:30 p.m.

Name(s) _____ Mail zone _____

Extension _____

How to Enroll for Space Systems Division Training & Development Courses

Employees may enroll in Space Systems Division Training & Development courses by submitting a request through their supervisor to their department's training coordinator. Do not call Training & Development directly; your training coordinator will make the necessary arrangements. Training coordinators are listed below according to their area of responsibility.

Training Coordinator	Representing	Extension
Bill Messer	A/C Program Office	75382
Judd Giesenschlag	Atlas Program Office	39827
Jane Duby	Contracts & Estimating	78045
John Parry	Defense Systems	39051
Patty Crooks	Finance	77349
Ken Gowen	Human Resources	77518
Peter Celto	Mission Integration	38087
David Pierce	Operations	38599
Tom Georgi	Planning	77444
Jim Cleghorn	Material	78324
John Derango	MLV Program Office	78021
Ray Jones	Program Development	39792
Mike Gusha	Quality Assurance	75709
Kimberly Drake	Research & Engineering	38187
Alan Breslauer	T/C Program Office	77933

New CRA club. A new Convair Recreation Association (CRA) club has been formed for Kenjutsu (Japanese swordsmanship). The club meets at the CRA clubhouse each Tuesday and Thursday from 8-9 p.m. For further information call Nick Busan, 77799.

Canteen Coffee Kudos

More than 1,030 cups of coffee a day, or 375,000 cups per month: that's the amount of coffee General Dynamics employees buy from Canteen Corporation's vending machines.

And recently, while replacing the coffee machine in building 4, column T-24, Canteen Corp., uncovered some unusual statistics.

Since it was installed in October 1980, the dependable machine has vended 715,000 cups of coffee, an average of 10,833 cups each month. That quantity translates into 11,917 pounds of ground coffee and 7,150 pounds—over 3½ tons—of nickels, dimes, and quarters. Profits from the machines help to support the CRA.

After a complete refurbishing, the reliable dispenser goes back into service at a new location.

New Feature Upcoming

From time to time the *Weekly Log* will publish issues and answers relating to the most commonly raised ethics dilemmas. Watch for this new feature in an upcoming edition.

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Production Editor: *Bruce Macdonald*
Assistant Editor: *Theresa Scherer*
Design/Layout: *Bill Ferebee*
Compositor: *David Gard*

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Convair State of the Division

PERFORMANCE IS THE KEY

Convair General Manager John McSweeny delivered his State of the Division address at the January 22 meeting of the National Management Association Convair Chapter. Nearly 1,000 people were on hand to hear McSweeny's perspectives on our accomplishments in 1986 and the challenges that confront us for 1987.

McSweeny stressed that performance is the key to greater success in the upcoming year. To remain competitive Convair must learn from the accomplishments and setbacks of 1986. It must give particular attention to the striving for excellence in all levels of development and production. What follows are highlights of the presentation:

1986 Accomplishments. The Tomahawk cruise missile family continued to meet and exceed customer delivery schedules, as well as achieving major new milestones:

- Ship Vertical Launch System (VLS) was integrated aboard USS Bunker Hill.
- Submarine VLS was demonstrated in submarine class 688.
- BGM 109-D (submunitions variant) demonstrated multiple-attack capability.
- BGM 109-C demonstrated programmable air burst.
- BGM 109-B achieved Initial Operation Capability with the sea-skim mission.
- Transporter Erector Launcher (TEL) and Launch Control Center (LCC) production made an excellent recovery to meet quality and schedule requirements.

The aircraft program continued to maintain its reputation for excellence. KC-10 fuselage deliveries for Douglas Aircraft Company were on time and within cost.

New Business. Convair's significant business wins during 1986 included Block II funding for the Tomahawk Anti-ship Missile (TASM); Long-range Standoff Missile (LRSM) studies; Boost Glide Vehicle (BGV) Contracted Research and Development (CRAD) wins; mission planning studies; smart weapons computer systems (artificial intelligence) research; and the MD-11 fuselage.

Year of Successful Audits. 1986 was a challenging year for Convair as we underwent several important audits and surveys.

These audits included security, labor accounting, property administration, Management Effectiveness Program (MEP), and the extensive Systems Status Review/Contractor Operations Review (SSR/COR).

Year of Training. In response to General Dynamics' commitment to the government, Convair conducted substantial training to ensure zero-defects administration. This training included ethics, overhead expense reporting, time cards, security, and new business funds.

1986 Setbacks. Convair was confronted with some adverse situations during the year. With the security suspension, reliability issues, and the reduced FY87 Tomahawk award, McSweeny said, "We need to learn from these and increase our training for future successes."

Employee Survey. In the Corporation's efforts to improve our company, a comprehensive survey was conducted to determine employee attitudes and views. McSweeny said that in 1987, we will work toward better planning, improved communication,

and an enhanced reward system for employees.

Convair employees reported an overall general satisfaction and a sense of pride in working on the Convair team.

1987 — A Year for Performance. McSweeny looks to 1987 as a year for "...paying attention to all elements — quality, schedule, and cost." "Competition is a reality," McSweeny said, "and we must find the areas needing improvement and fix them."

In 1987 we will continue to enhance manufacturing excellence. "Innovative people applying advanced technology" will be our theme. "We will be competitive for 1988," McSweeny said.

New business opportunities to pursue and expand upon in 1987 are the BGV, MD-11, advanced guidance technology, standoff weapons, and mission planning.

At the end of the State of the Division address, the General Manager profiled the candidates for the General Manager's Employee of the Year award.



General Manager John McSweeny (center) presents Mary Klement and Glen Yuguchi with the 1986 Employees of the Year award.

1986 Employees of the Year

Mary Klement and Glen Yuguchi were named the 1986 Employees of the Year by General Manager John McSweeny. Mary and Glen are both technically strong individuals with administrative skills that deserve special recognition, McSweeny said. They serve as a prime example of excellence in Convair's workforce.

Mary Klement

Mary joined Convair in 1978 as a senior engineer. Today, she is chief engineer responsible for logistic engineering and technology development. Mary was responsible for managing the development of materials and course content for the new business funds management policy.

Her work in Logistic Support Contracted Research and Development in-

cluded using computer-aided design (CAD) techniques to develop and demonstrate a supportability design for the U.S. Air Force.

The Reliability and Maintainability/Computer-aided Design (RAMCAD) — Mary's proposal which integrated supportability software into a CAD workstation and engineering analysis program — was the first model contract negotiated among the twenty-six submitted for review.

In 1987 Mary's task will be to maintain Convair's edge in logistic technology development through the RAMCAD effort, artificial intelligence, and robotics.

Glen Yuguchi

As the manager of New Business Administration - Program Development, Glen played a significant role in the critical task of developing a set of corporate policies and training procedures necessary to resolve the suspension issues related to management practices at General Dynamics. A member of the first Corporate Policy and Procedure working group, Glen was a key figure in collecting and reviewing existing materials. He helped prepare and present the briefing for the suspension team.

Glen is considered one of General Dynamics' most knowledgeable experts in the management of new business funding and is considered an excellent department manager.

Convair Employee of the Year Nominees

Vicki Parker, accounting specialist, Cost Accounting - Finance. Since joining Convair in 1984, Vicki's positive attitude and tireless dedication have earned her awards

and citations for all her jobs. Her accomplishments include contributing to the recertification of the property control systems, developing techniques used in the testing and implementation of the manufacturing lot learning curve system, and developing and implementing the current labor control procedures.

Doug Jones, group engineer, Quality Engineering - Quality Assurance. Doug had no previous work experience in aerospace when he came to General Dynamics in 1983. He has since proven that he is an exceptional engineer. Recently promoted to group engineer, Doug has gained recognition as an expert in the electronics/avionics area. His special assignments for the vice president - Quality Assurance, show the exceptional nature of his accomplishments in 1986.

Michael Pouliot, engineering specialist, Mission Analysis Systems - Research & Engineering. As technical manager for the ARMS contract, Mike's expertise and enthusiastic leadership are widely recognized. He has demonstrated exceptional creativity in developing programs for launch vehicle trajectory optimization and simulation, and magnet design optimization. In addition, he has earned two Extraordinary Achievement Awards for outstanding productivity.

Gail Drinkman, senior engineer, Organics and Composites - Research & Engineering. Gail has been employed with General Dynamics for only two and a half years, but her outstanding performance merits her nomination. She ran more than ten test programs for the Advanced Programs project and was lead engineer of a team which de-

veloped substantial modifications leading to increased product performance.

Sally Bond, program control specialist, Aircraft Scheduling - Operations. Sally joined General Dynamics in 1980 as an ambitious secretary. Today, several promotions later, she holds a lead position in the scheduling group. She has missed only one day of work in six years and has been awarded two Employee of the Month awards within the past six months. Sally has introduced automated scheduling, which has led to quality and cost improvements and developed the first article and proposal schedules for the MD-11 program.

Robert Anyon, senior manufacturing engineer, Detail Planning/Methods - Operations. Hired in 1979 as a mill operator, Bob has advanced to senior manufacturing engineer. As lead engineer, he has increased efficiency in cruise missile production through reduced Quality Assurance Reports (QARs), rework, and fabrication time.

He attended the University of California at San Diego Executive Program for Scientists and Engineers, where he was elected class spokesman at graduation.

William Bowersox, chief, Facility Management - Division Planning & Facility Management. Bill is recognized throughout General Dynamics as an expert in managing the division's facility budgets. He is also responsible for many of the office renovation projects: Defense Contract Administration Services (DCAS) area, KM building 1, and the relocation of 500 office positions from Seville Plaza to Century Park. Last year, Bill earned the highest award in the Management Effectiveness Program (MEP).

Dar Wirth, chief of Operations Estimating - Contracts and Estimating. For 21 years, Dar has provided outstanding estimating and negotiation support to every major Convair program. His ability to handle several assignments simultaneously was demonstrated in 1986 when he was asked to support the Tomahawk, MD-11, and advanced programs, as well as the Peacekeeper production and Boost Glide Vehicle (BGV) demonstration/evaluation proposals. In addition, he managed the manufacturing, tooling, and quality estimating groups, and supported the MEP reviews.

Donna Kaptain, Human Resources representative - Human Resources. The quality and quantity of Donna's work are remarkable. In 1986, as a staff member of the vice president of Human Resources, Donna coordinated responses to MEP and Systems Status Review/Contractor Operations Review (SSR/COR) questions; revised the Personnel Administration Manual (PAM) policies; served as a human resources rep-



1986 Employee of the Year nominations: (top, from left) Gail Brinkman, William Bowersox, Mary Klement, and Robert Anyon; (center) Glen Yuguchi, Vicki Parker, and Dar Wirth; (bottom) Donna Kaptain, Michael Pouliot, Doug Jones, and Sally Bond.

representative; and monitored indirect budget activity. These contributions, coupled with her "can do" attitude, make Donna an employee of tremendous value to her department and to the division.

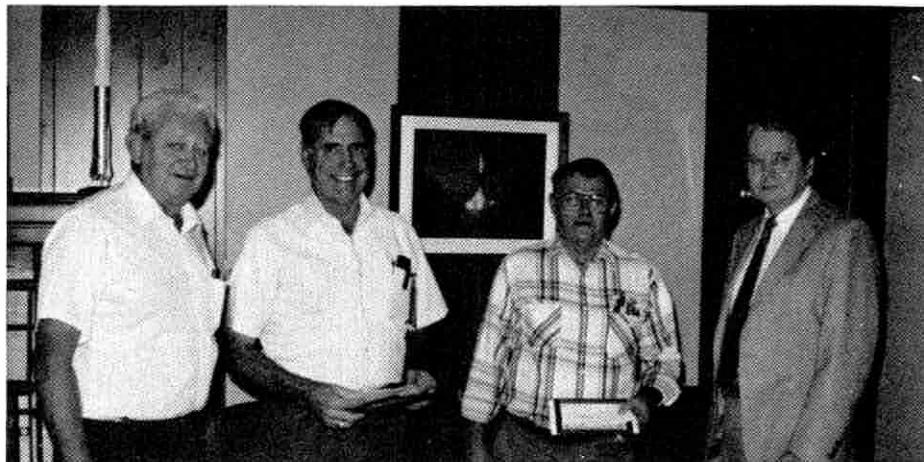
Space Systems Technicians Awarded

Two Space Systems launch service technicians at the Eastern Test Range have each been awarded \$2,230 for an employee suggestion which helped General Dynamics save \$44,600.

Ed Stewart and Harry Packer proposed that a protective coating be applied to the instrumentation umbilical adapters.

Without the flame-protective coating, the adapters were subject to blast damage during launch operations.

Under the new method the adapters can be refurbished after launch and reused.



Ed Stewart and Harry Packer, Eastern Test Range, receive employee suggestion awards of \$2,230 each. Their suggestion saved General Dynamics \$44,600. Pictured are (left to right) Jack Dean, Launch Operations group supervisor; Stewart; Packer; and Dan Sarokon, base manager.

Space Systems State of the Division

Space Systems Division General Manager Alan Lovelace will present his State of the Division message Wednesday, February 11, during the National Management Association Space Systems Chapter dinner meeting at the Town and Country Convention Center.

Lovelace will recap last year's accomplishments and preview Space Systems plans for 1987.

The event begins with no-host cocktails at 5:00 p.m., followed by a 6:15 p.m. dinner.

Tickets are \$13 and are available from Space Systems Chapter boosters.

For more information call Glorene Anderson, 75577.

Research and Engineering Class

Beginning January 28, an Introduction to Research and Engineering (R&E) class will be available each month for all R&E people. This new course is designed to provide an overview of all R&E departments and functions, and will address their relationship with other Convair departments.

The first class will be held January 28 at Kearny Mesa, Building 5, Mock-up Room C, from 8:00 a.m. to 10:00 a.m. To register, call Linda Loffredo, 38353.

Government Service Survey

On Tuesday, January 20, a follow-up government service survey was distributed to Convair's salaried exempt employees. The data is used to remind certain former government employees of their requirement to file annual Department of Defense reporting forms. In the survey, employees are asked to verify the data on file. If you did

not receive a survey form, or have questions, call 39493 or 38128.

Surveys are to be completed by Monday, February 2, and returned to Convair Professional Staffing, MZ 11-1340.

Scholarship Applications Available

Every year, the National Management Association awards scholarships to dependents of General Dynamics Space Systems Division, Convair Division, and DSD-Western Center employees, regardless of NMA membership. The primary requirement is that the dependent be a high school senior or recent graduate (not more than one semester past high school graduation).

Complete eligibility requirements are on the application forms. Available through the following NMA chapter representatives: Convair/Data Systems: Barbara Fager,

Commitment to Excellence

A newly released video tape, *Commitment to Excellence*, has been prepared for viewing by all Convair employees. This film highlights a few of the many creative people and innovative technologies at Convair.

Produced by the Productivity Department, it emphasizes how each individual can make a difference in our day-to-day operations and potential for winning new business.

Copies of the film are being distributed to the productivity coordinators within each function. Please contact them to set up a schedule for viewing within your department. The coordinators are:

Department	Coordinator	Phone
Information Resource Management	Judy Alden	68609
Planning and Facilities	Bill Bowersox	74941
Contracts and Estimating	Fran Cannon	75866
Finance	Andy Frank	75335
Human Resources	Joanne Kowalik	39529
Integrated Logistic Support	Barbara McDonald	78434
Research and Engineering	Larry Nelson	73611
Quality Assurance	Mark Saunders	38509
Program Development	Chuck Simmons	38100
Operations	Joe Stelmah	26980



The fact is fastening your safety belt
does take some time — but not much.
Take the time to buckle up!

The *Weekly Log* is published by Industrial Relations for employees of General Dynamics Convair and Space Systems divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ11-1330. *Managing Editor:* Cal Samuels; *Production Editor:* Bruce Macdonald; *Design/Layout:* Bill Ferebee; *Compositor:* Dianna Rich.

Published by General Dynamics Convair & Space Systems Divisions



Ken Lake, division vice president – Operations, poses with his Employees of the Year. From left are Joy Stockton, Ken Lake, Don Casinger, Harold Riley, Sally Bond, Antonio Kennedy, Bill Walling, Sandra Zembachs, John Gaus, and Dennis Bronk.

Lake Praises Operations for 1986 Accomplishments

Convair's Ken Lake, division vice president – Operations, recently assembled all Operations supervisors to review the department's 1986 accomplishments and to praise the team for their outstanding performance.

Lake thanked his people for achieving quality, schedule, and productivity goals, successfully passing multiple audits, implementing new manufacturing systems, and managing a \$500-million procurement operation. He also recognized the vital teamwork provided by the management support staff, and cited the maintenance personnel for their outstanding contributions.

For 1987, Lake said that a major goal for Operations is to become more cost effective. He added that other objectives are to enhance quality goals, maintain the excellent safety record, reduce waste, improve subcontract management, and address the issues raised in the Employee Survey.

Lake also introduced each of the Operations Employees of the Year and outlined their personal contributions to their respective departments.

Operations Employees of the Year

Dennis Bronk, aircraft assembler – Aircraft Product Line. Dennis' perfect attendance and key role in reducing flow time and cost on the KC-10 cargo door merit his nomination.

Diane "Joy" Stockton, senior facilities engineer – Plant Services. In addition to successfully completing the Coat & Paint Facility for Advanced Programs, Diane coordinated major Plant Services efforts for SSR/COR.

Sally Bond, program control specialist – Manufacturing/Material Control & Scheduling. Sally developed the MD-11 first article schedule and the supplier master schedule for the MD-11 proposal.

Bill Walling, material project coordinator – Procurement. Bill conducted overhead awareness training for the entire department and coordinated preparation for both the MEP review and the SSR/COR review.

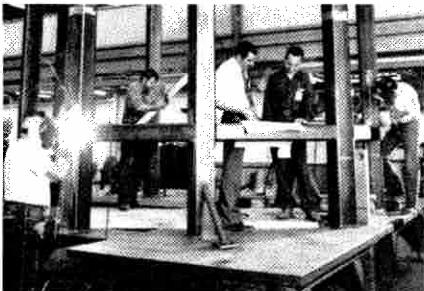
Antonio Kennedy, group leader – Cruise Missile Product Line. A natural leader, Antonio's "can-do" attitude is responsible for the high morale and the high-quality work found in his shop.

John Gaus, painter – Advanced Programs. Consistently demonstrating quality standards and good organizational skills, John has produced excellent craftsmanship on repair work for vehicle flight surfaces.

Sandra Zembachs, industrial engineer – Operations Administration. Sandra was a key contributor to both Sycamore Canyon and Cruise Missile Final Assembly work measurement analyses. She also excelled as author of the Paint & Processes Standard Data Package.

Don Casinger, planning specialist – Manufacturing Engineering. Don is responsible for the on-schedule position of the Scheduling Task Control Records (STCRs) and the Production Engineering Action Requests (PEARs). He also maintained the Transporter Erector Launcher/Launch Control Center (TEL/LCC) product structure.

Harold Riley, group leader – Fabrication & Production Engineering. Harold was a key figure in the development of primary tools and tool refurbishment program.



With more than 130 combined years of experience, these craftsmen apply their professional skills to produce a quality fixture for the MD-11. From left are Chuck Hayes, welder; Tim Mohr, toolmaker; Joe Schimka, supervisor; Lou Lacava, group leader; and Jorge Rivera, welder.

Tooling Up for MD-11

The Jig & Fixtures shop at Plant 19 is building the first major MD-11 assembly fixture, which will be used to assemble a new fuselage section for the Douglas commercial airliner. Unlike the DC-10 fuselage assembly fixtures that are used in the horizontal position, this new fixture is designed for vertical assembly.

This fixture is one of two major assemblies to be fabricated for the MD-11 production. Six to eight additional smaller fixtures will be made.



Members of the Technology Modernization program examine the new contracts with the Air Force. From left (standing) are project leaders Dick McCabe, Kevin Fitzpatrick, and Chuck Brinkman. (Seated) Gary Stidham – Aeronautical Systems Division, USAF, and Jim Petrie.

Convair Tech Mod Awarded New Contracts

The Convair Advanced Programs Technology Modernization program recently was awarded contracts for three additional projects to develop and demonstrate automation in several manufacturing areas. The projects will integrate new and existing technologies such as robotics, laser/vision, material handling, and computer systems.

Technology Modernization is a joint venture with the Air Force. According to Jim Petrie, manager – Technology Modernization, "Both General Dynamics and the customer share in the risks and benefits of advanced technologies to create a win/win environment. The recent contract award expands our Technology Modernization program into several key areas for Convair on the Advanced Programs."

These additional projects will bring the Advanced Programs total to eight Technology Modernization projects in development. Projects are scheduled to begin during the second quarter of 1987 with other projects continuing through 1988.

Ethics Dilemmas

Q. "Can a salaried employee do hourly employees' work?"

A. The Convair/IAM Labor Agreement provides that it is not the intent of the company to have supervisors or salaried personnel perform work within the scope of the IAM Bargaining Unit under normal conditions. Questions regarding what work is within the scope of the IAM Bargaining Unit or what constitutes abnormal conditions should be directed to Labor Relations, 26200.

If you have questions regarding ethics, call the Ethics Hotline: Convair, 38120; Space Systems, 38367.

Information Systems Steering Committee for Space Systems

The Information Systems Steering Committee (ISSC) members are responsible for screening, approving, and prioritizing requests for capital and development projects. Requests must be submitted on a Hardware/Software Request form and signed by your ISSC member before they are forwarded to Information Resource Management. ISSC members are listed below, according to their area of responsibility.

Function	ISSC Member	Phone	Mail Zone
Research & Engineering	Eugene Perkins	38328	23-8302
Contracts & Estimating	Elaine Kramer	77411	C1-7114
Finance	Lorraine Kimball	78397	C2-7130
Human Resources	Janet Goforth	39441	21-7142
Material	Kathy Milhaud	77583	C2-7850
Planning/Admin	Tom Georgi	77444	C2-7153
Production	Pat Lenarz	38398	53-7520
Program Development	Paul Kopcha	39111	32-7093
Quality Assurance	Mike Gusha	75709	21-7450
Atlas (WTR)	Bill Eaton	39832	21-7010
Atlas/Centaur (ETR)	Charlie Allen	38728	21-7020
Defense Systems	Frank Leinhaupel	39395	43-7050
Mission Integration	Pete Celto	38087	43-7060
Titan/Centaur	Alan Breslauer	77933	C3-7040
Chairman	Frank Maxfield (IRM Manager)	77355	C2-7153
Secretary	Sue Gillingham	77433	C2-7153
DSD Representative	Rich Ingardia	33438	W2-5271

Classified Combination Padlocks

Effective today, responsibility for changing the combinations on Convair Division Sargent & Greenleaf padlocks on classified containers rests with the Industrial Security department.

If you have a padlock that needs to be changed, pick up a replacement lock at one of these locations:

- Kearny Mesa — Master Document Control, building 1, 4th floor
- Advanced Programs — Program Security
- Lindbergh Field, Plant 19 & Harbor Drive — Contact Jeff Brown, 27016

If you no longer need your Sargent & Greenleaf padlock, attach the combination and turn it in at an issue point (listed above).

Tour the Orient

Thanks to the General Dynamics Offset Vacation program, winter vacations to Hong Kong, Korea, and Turkey are available to you and your family and friends at very affordable prices.

From now until February 28, you can take a seven-day shopping tour of Hong Kong that includes air transportation from San Diego on Korean Air Lines and five nights lodging for \$799 per person, less a \$50 per person discount for a low \$749. Many options are available for extending your tour to Bangkok, Singapore, Taiwan, or other destinations in the Orient.

Brochures and information about these tours and other independent travel packages are available through General Dynamics Travel Services. Ask for Norma, 78327.

Tomahawk Team Congratulated for Flight Successes

Upon completing three successful Operational Test Launches the week of January 18, the following message was received from Rear Admiral L.E. Blose, Director of the Cruise Missiles Project.

"The entire Tomahawk Test Team is to be congratulated for the successful launching and recovery of Tomahawk land-attack nuclear missiles . . .

"The successful completion of three Tomahawk land-attack missions from two firing units in 24 hours demonstrated the maturity of the entire Tomahawk weapon

system and its readiness to support the national goals of the United States. These three missions will support Tomahawk fleet introduction and increased availability of Tomahawk cruise missiles for deploying units . . . A hearty well done to all concerned."

Employment

For the week ending January 23, Convair Division employment was 8,936; Space Systems Division employment was 2,759.

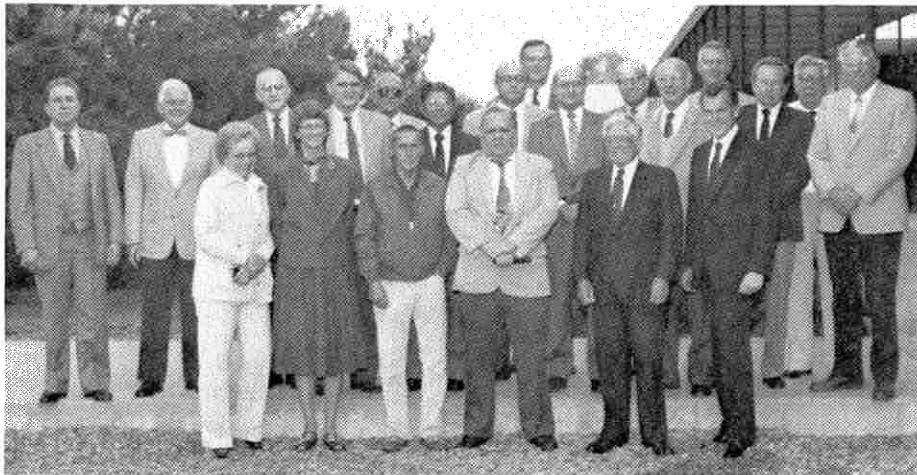
CONVAIR

WEEKLY LOG

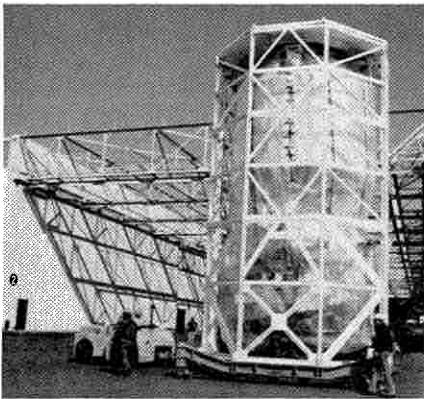
February 9, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



At a recent service awards breakfast, Convair acting General Manager Mike Keel recognized employees for 35, 40, and 45 years of service. Attending were (front row, from left) Helen Faber (35), Chloe Bradshaw (35), Richard Harr (35), Gerald Fisher (35), Art Wrightson, Jr. (40), and Mike Keel. (Second row) John Borrego (35), Daniel Tucker (40), Robert Zinser (45), Bruno Bracka (staff), Terry Nishida (35), Norm Tipton (staff), William Engelke (35), Russell Bjorstrom (35), and Palmer Smith (35). (Third row) John Ward (40), Donald Maxion (35), Larry Nelson (staff), Gerald Olson (45), Ed Squires (staff), and Ferdinand Bergen (35).



With the aid of a large aircraft tow tractor, Transportation and production personnel move the Shuttle Centaur vehicle (SC-1) into storage at Plant 19.

Shuttle Centaur Vehicles Await Use

General Dynamics has not forgotten its investment in the Space Shuttle program. The first two Shuttle Centaur vehicles (SC-1 and SC-2) are in storage at Plant 19, waiting to be used.

In late 1988, SC-1 will be used as a test vehicle to complete the validation of Space Systems Thermal/Acoustic Test Facility (TATF). General Dynamics is currently pursuing plans for using SC-2.

SC-1 and SC-2 were originally scheduled to propel the Galileo and Ulysses spacecraft to Jupiter in May 1986. After the Space Shuttle *Challenger* mishap in January 1986, NASA cancelled the Shuttle Centaur program, dismantled the vehicles, and shipped the hardware back to San Diego. Space Systems reassembled the vehicles before storage.

Security Tip: Defense Hotline

A recent revision to the Department of Defense (DoD) Industrial Security Manual requires contractors to inform their employees of an available Defense Hotline. Organized by the Office of the Inspector General — DoD, this hotline provides a confidential channel for reporting known or suspected fraud, waste, and security irregularities and infractions without fear of reprisal.

If the need to report an incident arises, you may notify your supervisor, call Industrial Security (38417), or use the Ethics Hotline (Convair, 38120; Space Systems, 38367). You can reach the Defense Hotline by calling (800) 424-9098, or by writing to: Defense Hotline, The Pentagon, Washington, D.C. 20301-1900.



Keith Lauer receives his Employee of the Month award from Ray Beuligmann, division vice president – Research & Engineering. From left are Jules Hertz, manager; Beuligmann; Lauer; and Ron Torgerson, engineering chief.

Lauer Named R&E's Employee of the Month

Keith Lauer of Project Support (633-4) was recently named Research & Engineering (R&E) Employee of the Month for December 1986. As a senior engineering specialist, Keith was recognized for his outstanding accomplishments in providing timely and effective engineering support for the FY 87 All-Up Round proposal effort by clarifying the scope and impact of new customer requirements for electronic components.

Nominations for R&E Employee of the Month are accepted by the 14th of each month for the following month's candidate. For information, call Gayle Frank, 38166.

McSweeney to Receive Gold Knight Award

John McSweeney, Convair's general Manager, will receive the Gold Knight of Management award at the National Management Association joint meeting of San Diego County Council chapters on Tuesday evening, February 10, at the Kona Kai Club on Shelter Island.

Pat Roper, the featured speaker, will speak on "Survival and Success in the American Free Enterprise System." The social hour begins at 5:30 p.m., dinner at 6:30 p.m. Tickets are \$10.00 for members and spouses and \$18.00 for nonmembers.

For more information, call Marlene Leuschner, 49025.



Peggy Jacques is presented her Apprenticeship Completion Certificate as a Senior Tool and Operations Planner by Larry Gaskell, chief - Advanced Manufacturing Engineering. She has completed the 8,000 hours of on-the-job training and will soon receive her Associates of Science degree in Manufacturing Technology.

Ethics Dilemmas

Q. Can I rely on the confidentiality of the Ethics Hotline?

A. Yes, you can. When the Ethics Hotline is personally answered by the Ethics Program Director, the caller is ensured confidentiality because you do not have to reveal your identity if you so choose.

If the caller reaches the Hotline answering machine, the option is there to leave your name and phone number, or to call back later. Either choice you make still guarantees confidentiality.

The Ethics Program Directors are committed to protecting the caller's anonymity. In the case where action must be taken to resolve a dilemma, the director will inform the caller of all possible ramifications before researching the situation.

If you have questions regarding ethics, call the Ethics Hotline: Convair, 38120; Space Systems, 38367.

Smoking Policy Reminder

Personnel Administration Manual (PAM) 5-4 states, "Smoking is prohibited in the following captive areas: conference rooms, classrooms, elevators, libraries, stairwells, projection rooms, interplant buses, restrooms, medical reception areas, and Graphic & Reproduction waiting areas."

Take Time for Convair Time Cards

Prompt and timely submittal of time cards (TDCs) is essential for both labor and payroll processing schedules. If your TDC is submitted late, your labor will not be processed in the current week and costly adjustments will be required. The Corporation uses your labor to bill the customer, so timely processing is essential.

Late and improperly prepared TDCs are reported to management for corrective action. Please ensure that your TDC is turned in and processed on time.

If you have any questions, call the Convair Labor Charging Help Line at 24647.

Community Opportunity: Save-a-Tot Car Seat Program

In cooperation with the San Diego Coalition for Children's Car Safety, the Poway Kiwanis club has begun a community service project to provide San Diego County children with vehicle safety seats. These seats are available at no cost for both short- and long-term use by deserving children.

This is National Child Passenger Awareness Week, and you can join the campaign by donating those no-longer-needed child seats that may be cluttering your garage or attic. Simply bring them to the Kearny Mesa or Lindbergh Field fire station.

For more information about the program, call Richard Dawson, 73193.

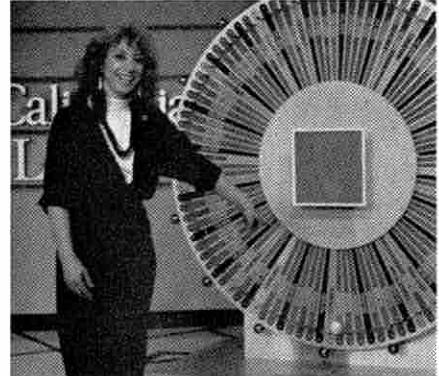
Red Cross Offers CPR Classes

An eight-hour course on Cardiopulmonary Resuscitation (CPR) will be offered during February at Our Gang Children's Center, 10250 Scripps Trail, San Diego. The course gives an overview of the CPR technique of combining mouth-to-mouth resuscitation with external cardiac compressions to restore breathing and heartbeat in cardiac arrest victims, and first aid for foreign body obstruction of the airway. Prerequisite is minimum age of 13 years or completion of seventh grade. The registration fee of \$8 includes all materials. Certification will be awarded upon successful completion of the course.

For complete information, call 291-2620.

CRA News

The CRA Health Fitness Center has started a nutrition counseling program. Consultant Kristina Jenny will work on an individual basis with General Dynamics employees to design a personal program that will fit their lifestyle. The first consultation is free. For more information, call 39921.



Diane Lewis, travel reservationist, won \$100,000 on the California lottery Big Spin. "It was so exciting. I wish everyone could experience the thrill of winning \$100,000," Lewis said.

Naval Reserve Officers Needed

The U.S. Naval Reserve is looking for aerospace engineers and scientists to serve as Aeronautical Engineering Duty Officers. Although prior military service is desirable, it is not a requirement. Individuals accepted into the Aeronautical Systems Program would work one weekend a month and serve on active duty two weeks each calendar year. Military pay and retirement benefits are included. Interested individuals should contact Bill McMurry, 27102, or Lieutenant Kathryn Mahoney at 437-7537.

IRM Classes Available

Information Resource Management (IRM) is offering a one-hour Work Authorization Plan (WAP) writing class and a four-hour Planning & Budgeting class.

The Planning & Budgeting class covers WAP writing, along with the planning and budgeting process, starting with the sales order and related accounting and budgeting reports.

These classes are available upon request. Contact your departmental training coordinator, or call Connie, 68692.

Employment

For the week ending January 30, Convair Division employment was 8,921; Space Systems Division employment was 2,758.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330.

Managing Editor: Cal Samuels
Production Editor: Bruce Macdonald
Assistant Editor: Theresa Scherer
Design/Layout: Bill Ferebee
Compositor: David Gard

CONVAIR

WEEKLY LOG

February 16, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Space Systems State of the Division**PROUD PERFORMANCE,
PROMISING FUTURE**

Space Systems General Manager Alan Lovelace delivered his State of the Division address at the February 11 meeting of the National Management Association Space Systems Chapter. A sellout crowd of 600 people were on hand at the Town & Country Convention Center to hear Lovelace recall the division's 1986 accomplishments and preview 1987 opportunities and challenges.

During his introductory remarks, Lovelace reviewed some of the 1986 setbacks for both Space Systems and the national space program. NASA's decision to cancel the Shuttle Centaur program "was a tremendous disappointment to us all," Lovelace said. "But 1986 was also a year of significant accomplishments for our division and our people."

What follows are highlights of the presentation.

1986 Accomplishments**Successful Launches**

An Atlas H was successfully launched in January from Vandenberg Air Force Base. Atlas 52E placed a National Oceanic and Atmospheric Administration (NOAA) satellite into orbit in September. This spacecraft was a combination weather and search-and-rescue satellite for NASA. In December, Atlas/Centaur 66 was launched from Cape Canaveral carrying a Fleet Satellite Communication (FLTSATCOM) satellite.

Milestones Met

- Two dipolar superconducting magnets were completed in March and delivered to Texas Accelerator Center.
- In October, Space Systems was given the final go-ahead on the Titan/Centaur program.
- Research continued on NASA's Orbital Transfer Vehicle study for carrying payloads and personnel into space.
- The Heavy Lift Launch Vehicle (HLLV) study showed significant promise in reducing the cost of delivering payloads into space.
- The Thermal and Acoustic Test Facility was completed.



Elaine Kramer is presented Space Systems Employee of the Year award by General Manager Alan Lovelace. "In the course of her accomplishments," Lovelace said, "Elaine has demonstrated dedication and leadership that is an inspiration to us all."

1987 Opportunities and Objectives

"While losing the Medium Launch Vehicle (MLV) competition was not the best way to start off the new year," Lovelace said, "it does not represent the end of 1987 by any means. The space business is a very competitive and rapidly changing industry that is still in its infancy. As this market expands, General Dynamics will emerge as a major industry force. The future of our new division is indeed promising, and primarily because of you — our people."

Space Systems' 1987 Goals

- Perform within budget and ahead of schedule on the Titan/Centaur program.
- Explore opportunities to offer Atlas/Centaur for government and commercial missions.
- Pursue the development of the Heavy Lift Launch Vehicle (HLLV), one of the nation's top-priority space programs.
- Compete for a new, high-energy upper-stage booster — the Adaptable Space Propulsion System.
- Continue our involvement in developing the National Aerospace Plane, also known as the Orient Express.
- Capitalize on our work for Strategic Defense programs.

In summary, Lovelace said, "The civilian and military programs I have described will restore America's leadership in space technology and provide excellent growth opportunities for Space Systems Division well into the next century. We must all work together to set the stage for these long-range accomplishments right now in 1987."

1986 Employee of the Year

Elaine Kramer was named Space Systems 1986 Employee of the Year by General Manager Alan Lovelace.

Elaine joined General Dynamics fifteen years ago as a keypunch operator. Her desire to seek greater challenges helped her progress to her current position as senior estimating specialist — Contracts & Estimating. Over the past four years, Elaine has been the key contributor to the development of Space Systems' Cost Pricing System. In addition, her hard work and expertise were vital to both the Medium Launch Vehicle and Titan/Centaur programs in 1986.

**McSweeny Receives
Gold Knight Award**

Charles Rue, National Director of the National Management Association, presented Convair General Manager John McSweeny with the Gold Knight of Management award at the February 10 joint meeting of San Diego County Council chapters.

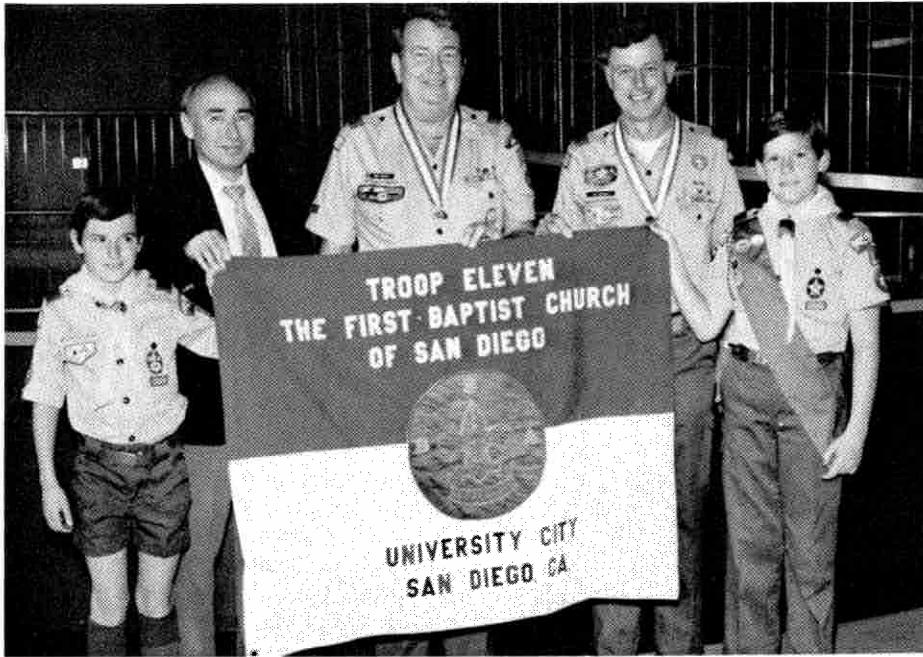
In presenting McSweeny with the award, Rue said, "This is the highest award an area council can bestow upon an individual. It is awarded to people in management whose leadership qualities are evidenced in the work place and are also transferred into the community. John McSweeny clearly demonstrates these qualities."



Convair General Manager John McSweeny (left) receives the Gold Knight of Management award from NMA National Director Charles Rue.

Just a Reminder

Employees must give a new W-4 form to Payroll so that the proper amount of withholdings can be deducted in 1987.



Jonathan Forrest (left) and Tiger Rowan (right) display the Troop 11 flag with Boy Scout committee members (from left) Donald Forrest, Space Systems; and Bert Watton and Bob Niderost, Convair.

General Dynamics Recognizes Boy Scout Week

Old Glory flew alongside a different banner every day last week on the flagpole in front of Building 2, Kearny Mesa. In recognition of National Boy Scout Week, General Dynamics raised a different troop's flag each workday from February 9 through 13.

On Monday, Boy Scouts Jonathan Forrest and Tiger Rowan of Troop 11 presented their flag to employees Donald Forrest, Bert Watton, and Bob Niderost. These employees represent the several hundred local

General Dynamics people associated with the Scout program in various capacities.

"By encouraging the development of leadership skills through emphasis on camping and the outdoors," explained Niderost, "the Boy Scout program hopes to help youngsters become better citizens. Our mission is to build character through role modeling."

Tiger likes scouting because it gives him an opportunity to meet new people and to try new experiences.

Jonathan agrees. "Going out on hikes and campouts is a lot of fun," he said. "Only sometimes the food is bad."

Space Systems Employee of the Year Nominees

Michael Gass, chief of Facilities Planning - Planning & Administration. Mike assumed responsibilities well beyond his normal job duties when he oversaw the realignment process that separated the Convair and Space Systems Divisions. He identified realignment tasks, developed implementation schedules, and monitored compliance.

David Ibarra, senior Human Resources representative - Human Resources. David's 1986 accomplishments were a key factor in helping staff Space Systems Division. His tireless efforts to hire qualified individuals will benefit the division for years.

Kathryn Milhaud, senior procurement specialist - Material. Kathy was responsible for coordinating procurement systems activities to support the division realignment. She also implemented an automated purchase authorization print system.

William Ketchum, proposal development specialist - Program Development. Bill's extraordinary blend of experience and leadership capabilities have made him a key contributor to many of Space Systems' most important proposals.

Steve Kewley, chief of the Engineering Support Group - Research & Engineering. Steve has implemented procedures to improve the quality and productivity of the engineering and drafting functions. His accomplishments will help Space Systems efficiently engineer the next generation of Space Transportation Systems.

Don Sandberg, Operations supervisor - Defense Systems. Don has been directly responsible for the fabrication, assembly, and delivery of many important high-quality, high-technology products. His dedication and leadership merit recognition.

Gary Hayes, senior financial analyst - Finance. Gary managed all the financial

aspects of Space Systems contracted and in-house technology development activities last year. He also received division and corporate Extraordinary Achievement Awards for his contribution to the Finance department's Management Effectiveness Program.

John Grier, engineering specialist - Production. John has demonstrated that special combination of attention to detail and breadth of expertise important to any company that strives to manufacture high-quality, low-cost products. He was recognized as his department's Employee of the Month twice in 1986.

Michael Schweitzer, chief of Procurement Quality Assurance - Quality Assurance. Mike's role in developing rapport between production and quality control personnel made possible the establishment of new procedures for reducing deficiencies and improving customer satisfaction.

Scholarship Applications Available

Every year, the National Management Association awards scholarships to dependents of General Dynamics Space Systems Division, Convair Division, and DSD-Western Center employees, regardless of NMA membership. The primary requirement is that the dependent be a high school senior or recent graduate (not more than one semester past high school graduation).

Complete eligibility requirements are on the application forms, available through the following NMA chapter representatives: Convair/Data Systems: Barbara Fager, 39937; Space Systems: Jim Delano, 39052.

CRA News

Ex-Smokers for Life There will be an introductory meeting for past and present smokers on Thursday, February 19, at 4:45 p.m. in the CRA conference room. For your reservation or more information, call 39921.

Employment

For the week ending February 6, Convair Division employment was 8,936; Space Systems Division employment was 2,762.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330. Managing Editor: Cal Samuels Production Editor: Bruce Macdonald Assistant Editor: Theresa Scherer Design/Layout: Bill Ferebee Compositor: Dianna Rich

CONVAIR

WEEKLY LOG

February 23, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Convair employees featured in the Professional Staffing department's recruiting advertisement are (from left) Corrine Hardison, Deidre Da Silva, Howard Newman, and Nicholas Van Dorn.

We're Looking for Another "Brilliant" Idea

It started early in 1986 with a creative brainstorm between Joel Brilliant, Human Resources administrator, and Al Kidd, vice president of Knoth and Meads Advertising Agency. The idea that emerged? An award-winning advertising campaign for the Professional Staffing department of Convair.

First published in August 1986, the advertisements won the coveted *San Diego Union* and *The Tribune Ad '86* award for newspaper advertising excellence.

The ads have been published in numerous trade journals, major newspapers, and minority publications across the country, among them Aviation Week, Aerospace America, Electronic Engineering Times, and the National Society of Black Engineers.

Most likely you've seen the ads: two individuals are pictured, the first a historical figure who has made significant contributions to science. The other is a Convair employee who has demonstrated excellence in the field. Convair, the copy states, continues to look for creative professionals to join its team.

The first step in designing the ad was selecting the appropriate historical figures. Thomas Edison, Leonardo Da Vinci, Isaac Newton, and Wernher von Braun were the

scientific luminaries chosen for the campaign. Brilliant and Kidd then scanned the Convair telephone directory to find employees with similar-sounding names, coming up with four whom they felt represented the company well: Research & Engineering's Corrine Hardison, Deidre Da Silva, Howard Newman, and Nicholas Van Dorn.

It worked. "We're looking for another Da Vinci," read the boldfaced caption above a contemporary etching of the Italian master inventor and scientist. "And another Da Silva," informed the facing page above a photograph of Deidre, followed by copy lauding her work and the company's goal to recruit other outstanding professionals.

The advertising campaign's focus on specific individuals wasn't a problem. "In fact," said Brilliant, "the people aspect is an integral part of our methodology for recruitment advertising. It's evident in the historical profiles of our new Great Talent Search program and in our series of recruiting brochures. We expect to continue the campaign through 1987 with new faces of historical greats and our talented current employees."

And the rest of us at Convair, meanwhile, will continue to reap the benefits of the creative talents of Joel who, along with Al, had a Brilliant idea of searching for the right new Kidd on the block to recruit into our talented workforce.



Student Body President David Berger accepts the NMA adoption plaque. (From left) Alan Lovelace, David Berger, Chapter President Bill Messer, and Hilltop principal Dr. Maria Medrano.

Partnerships in Education

Space Systems Division chapter of the National Management Association (NMASS) adopted Hilltop High School during a recent ceremony at the Chula Vista school.

Space Systems General Manager Alan Lovelace attended the ceremony. "General Dynamics has always been a leader in space development," he said, "and it is appropriate to adopt a school that is also a leader in public education."

NMASS will provide Hilltop with technical classroom support, a speakers' bureau on vocations at General Dynamics, field trips to the plant, and assistance with the co-curricular activity program.

Greg Cox, Mayor of Chula Vista, and Anthony Trujillo, superintendent of Sweetwater High School District, were guests at the event.

KM A10 now KM041A001?

Data Systems Division - Western Center distribution is in the process of standardizing the names of pick-up and delivery stations in all San Diego General Dynamics facilities. The new system went into effect at the Kearny Mesa facility on February 16 and standardization at other sites should be completed in early March.

Under the new plan, each location is assigned a nine-digit code designating facility, building, floor, drop-off point, and bin number. Data Systems Division will distribute a listing of the new user bin numbers.

Do you have a new phone number or mail zone? Report any changes to Telecommunications, 73413, to help update their files.



Al Pope was the key speaker at the Annual Vocational Educational Conference for San Diego Community College District.

Al Pope Key Speaker at Educational Conference

Al Pope, Convair's manager of Training and Motivational programs, was the featured speaker at the Annual Vocational Educational Conference for the San Diego Community College District held February 12 at the Scottish Rite Center.

Representatives from the academic, political, and industrial communities attended Pope's speech, "Partners in Progress: Looking Towards the Future," which focused attention on long-range goals and a strategic vision for the future. His speech highlighted the common demands placed on education, industry, and business.

Speechcraft Sessions Offered

Two Speechcraft sessions — public speaking programs conducted by the Toastmasters club — will start on both Tuesday, March 10, and Thursday, March 12, at the CRA. Each eight-week session will present the fundamentals of verbal communication. Cost is \$10.00. For reservations or more information call: Tuesday session — Jim Kelly, 38075, or Ken Miller, 77216; Thursday session — Caroline Harbeck, 73480, or Bill Gallaher, 49765.

Notices

Payroll Department Hours

Effective February 23, 1987, the Convair Payroll Department will be open Monday through Friday from 7:30 a.m. to 9:30 a.m., and from 2:00 p.m. to 4:00 p.m.

Gate 1 Reserved Parking

The reserved parking lot north of gate 1 at Kearny Mesa is scheduled for resealing during the weekend of February 28 to March 1. Striping of the lot will be done in stages on March 2, 3, and 4. Employees are asked to use the open parking lots when their specific area is being resealed and striped.

December Retirees

Thanks and best wishes for a happy retirement to those employees who retired in December:

Name (Classification)	Years of Service
Robert R. Atkinson Missile Mechanic	46
Sedwick O. Atwood Engineer, Sr.	45
Nick P. Bebaeff Logistics Specialist	9
Charles E. Brickell Configuration Management Specialist	4
Francisco A. Chavez Group Leader	40
Orville A. Copley Mfg. Systems Data Analyst	38
Wayne E. Crow Chief - Product Support	30
Johnny Daniels Group Leader	9
William Emrich, Jr. Subcontract Representative	18
Dillman D. Dimmitt Chief - Human Resources	35
Miguel Flores, Jr. Calibrations Technician	32
Louis I. Gordon Receiving Inspector	30
Hopo Jameson Lift Truck & Tractor Operator	19
John L. Johnson Logistics Administrator	4
Robert C. Kemp Publication Proposal Coord.	34
John G. Largent Engineer Sr.	27
Barbara L. LeRoy Manufacturing Control Spec.	35
Leopoldo E. Lopez A/C Assembler	38
Arthur H. Mandale Engineer Sr.	27
Clarence E. Miller Chief of Plant Protection	36
Howard P. Moore Quality Assurance Specialist	4
Richard F. Mutsch Operations Supervisor	30
Stanton L. Myers Missile Mechanic	30
Warren W. Nobiensky Mockup Mechanic	32
Anibal Perez A/C Assembler	15
Olga T. Ragsdale Electrical & Electronics Assembler	14
Earl H. Rayspis Engineering Specialist	12
Donald E. Rheaume Financial Specialist	42
Chester Serowik Launch Service Mechanic	27
Julius Setmire Fire Lieutenant	19

Robert L. Shrum

Mock-up Mechanic	24
Anthony A. Valasakos Accounting Analyst	34
Martin D. Weisinger Engineering Specialist	25
Donald B. Woodruff Group Leader	32
Elizabeth M. Wright Duplicating Machine Operator	27
Mark M. Yamaguchi Missile Mechanic	27

Pace CNN Guest

Chairman and Chief Executive Officer Stanley Pace was a special guest on CNN's "Inside Business" on February 15, 1987. Reporters Paul Strum of *Business Week* and Charles Camp of the *Wall Street Journal* questioned Pace on the Corporation's position as a major defense contractor. Pace discussed the problems that the Corporation has encountered, the corrective actions implemented, and the future outlook for the company.

Employees can obtain a copy of the speech by contacting Bob Stevens, Motion Pictures & TV, 39715.

Certified Management Accounting Program

The Certified Management Accounting (CMA) Program is now an official program of General Dynamics Corporation. Those who have expressed interest in the program are encouraged to register immediately, as the cutoff date for registration is March 1987 for the June CMA exam. The preparation program will begin on-site in April.

Finance personnel and those who have not heard about the program are encouraged to contact their supervisors/managers and the Program Coordinator, Jim Brown, 77850.

Just a Reminder

Employees must give a new W-4 form to Payroll so that the proper amount of withholdings can be deducted in 1987.

Employment

For the week ending February 13, Convair Division employment was 8,950; Space Systems Division employment was 2,766.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330. Managing Editor: Cal Samuels Production Editor: Bruce Macdonald Assistant Editor: Theresa Scherer Design/Layout: Bill Ferebee Compositor: David Gard

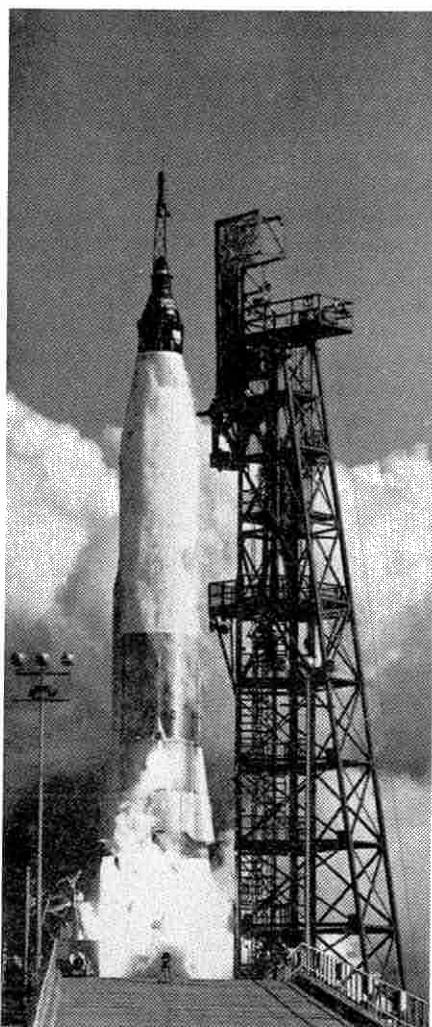
CONVAIR

WEEKLY LOG

March 2, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Friendship 7 begins its ascent on February 20, 1962. Lt. Col. John Glenn piloted the Mercury capsule launched by Atlas 109D.



Ray Beuligmann, division vice president - Research & Engineering (left), and supervisor Hugh Reynolds (right) present Brian Hillier with Research & Engineering's Employee of the Month Award.

25th Anniversary of John Glenn's Flight

Mercury/Atlas Space Flight Commemorated

The United States made history on February 20, 1962, when it successfully launched the free world's first manned orbital flight. *Friendship 7*, the Mercury capsule piloted by astronaut John Glenn, was boosted into space by a General Dynamics Atlas 109D missile.

The Series D Atlas was a proven ICBM performer, and the experience gained in launch tests and operations made it the ideal choice for launching the manned vehicles of the new Mercury/Atlas program. After six unmanned developmental flights, Glenn's mission was deemed ready. Three more manned Mercury/Atlas flights followed. In May 1963, the program was completed with the 22-orbit mission of Gordon Cooper, who was rocketed into space by Atlas 130D.

Twenty-five years later, the epochal event of John Glenn's first manned orbital launch was commemorated at a ceremony at Cape Canaveral Air Force Station (CCAFS) in front of the Project Mercury Monument.

Special guests at the ceremony included Tom O'Malley, the test conductor of the Atlas 109D; Colonel Wayne Penley, CCAFS Commander; and Jim Womack, Acting Director - Expendable Launch Vehicle Operations, Kennedy Space Center. Space Systems Division was represented by Master of Ceremonies Bob Beasley, Chief of Support Services, and Dan Sarokon, Manager of Base Operations.

R&E Employee of the Month

The Research & Engineering (R&E) department presented Brian Hillier, engineering specialist, with its February Employee of the Month Award.

Brian's efforts played a key role in the development of the techniques, equipment, and procedures used in the Ground Launched Cruise Missile Functional Ground Test Program.

The testing of the Pathfinder missile for the test program was accomplished ahead of schedule and under budget.

Convair Receives

Chairman's Award of Honor

General Dynamics Chairman and Chief Executive Officer Stanley C. Pace has awarded Convair the Chairman's Award of Honor for "Excellence in Safety and Health Performance for 1986." This award marks the 13th consecutive year in which Convair has received Corporate recognition for the quality of the overall safety program.

In a letter to Convair General Manager John McSweeney, Pace said, "This Award is presented to the Division which meets all established occupational injury and illness rate goals, has no occupational fatalities during the year, and has no Safety and Health Program key elements rated unsatisfactory during the annual SHAPE review.

"Please extend our congratulations to members of management and employees who are responsible for this outstanding performance.

"I hope this splendid achievement will promote continued interest in your Safety and Health Programs and encourage your employees to continue their safe work habits during 1987."

Blood Drive

Convair, Space Systems, and DSD - Western Center Blood Drive will be held March 23-27. Reservation details will be provided next week.

Important Security Reminder

Be prepared. The Defense Investigative Service inspection begins next Monday, March 9. This highly important inspection involves Convair's overall Industrial Security program. In addition, the customer's security inspection of the Advanced Cruise Missile (ACM) program will also commence on March 9.

If you need assistance in preparing for these inspections, call Industrial Security, 39366, or 27138 for ACM security.

New Switchboard Hours

Effective March 9, 1987, the General Dynamics switchboard hours will be 7:00 a.m. to 5:30 p.m. Monday through Friday. Please advise offsite personnel and those on travel.



Convair's Mark Sunday at Management College

Corporate Office has selected Convair's Mark Sunday, chief - Logistics Engineering, to attend the Defense Systems Management College at Fort Belvoir, Virginia. The five-month program management course started January 26. It is designed to provide a comprehensive study of program management and an overview of Department of Defense acquisition policy. Participants develop management skills and gain experience in the practices and problems associated with program management operation.

Although the program is designed for military and government employees, a limited number of industry nominees are invited. Each General Dynamics division nominated employees; Corporate Office then selected Mark as the General Dynamics representative.

Ethics

- Q.** What is the purpose of the Convair Ethics Advisory Committee, and who serves on it?
- A.** The primary purpose of the Ethics Advisory Committee is to provide policy and program implementation guidance to the Ethics Program Director. The committee reviews cases of unethical behavior (fraud, waste, abuse, and so on) and recommends corrective action, including disciplinary measures.

In addition, the committee monitors the activities of the Ethics Program to ensure consistency and to sustain divisionwide consciousness of its standards and procedures. The committee is comprised of:

- Chairman: Division Vice President and Legal Counsel
- Secretary: Ethics Program Director
- Division Vice President - Human Resources
- Division Vice President & Controller - Finance
- Division Vice President - Contracts & Estimating



"Thank you, Convair, not only for the fantastic recognition awards, but also for reuniting me with my former coworkers."

Great Talent Search Pays Off

The following letter was submitted by Convair's Lorene Karaffa, senior engineering planner - Signature Technology.

It was my first day at General Dynamics, and I was depressed. I had to leave old friends to start my new job with the Signature Technology department.

Then I discovered the Great Talent Search (GTS) Program. I could recommend my talented former coworkers and, if General Dynamics hired them, receive wonderful prizes. I began recruiting immediately.

My first GTS award was a beautiful velour sofa. I won it after recommending my former boss, an engineering specialist. My second gift came after I recommended a senior engineer — another friend from my previous job. The recliner, coffee table, and end table I received look wonderful in my living room.

My latest award, a bedroom set, will be delivered any day. General Dynamics awarded it to me when a Radar Cross-Section Group Engineer whom I'd recommended accepted employment.

The GTS program really does work for everybody. Convair benefits by adding highly trained and qualified individuals to its work force, and participants are rewarded with high-quality gifts for their recommendations. Thank you, GTS!

People don't dislike work . . . help them to understand mutual objectives and they'll drive themselves to unbelievable excellence.

Employment

For the week ending February 20, Convair Division employment was 8,964; Space Systems Division employment was 2,765.

January Retirees

Our thanks and best wishes for a happy retirement to those employees who retired in January:

Name (Classification)	Years of Service
William E. Apfel Program Manager	28
Harold S. Arneson Engineering Specialist	33
Harold G. Bradley Group Engineer	37
John E. Burgeson Engineering Specialist	36
Jean M. Castaneda Blueprint Control Clerk	30
Richard C. Christopher Operations General Supervisor	31
Joseph V. Davis, Jr. Group Engineer — QA	25
Anthony C. Garegnani Group Leader	35
Juanita J. Geierman Management Statistician	3
Philip E. Grasmick Operations Supervisor	29
Thomas A. Hutchinson Engineer	29
Charles M. Keys Manager of Technical Publications	30
Ernest C. Laudeman Engineering Specialist	32
Robert H. Looper Fire Lieutenant	34
James T. Lumgair Engineering Chief	35
Mary L. Ludwig Staff Secretary	36
John C. McBratney Engineer Sr.	36
Yoshie Okuma Product Planner	28
Frank Piersall, Jr. Quality Engineer	27
Edward F. Quinn Engineering Test Tech	39
Herbert M. Ryden Engineering Illustrator	26
Dean F. Sharp Group Leader	31
Albert E. Smith Planer Machinist	10
Charles A. Stewart Supervisor - Procurement	36
John E. Strachan Air Conditioner & Refrigeration Mechanic	20
Betty M. Swanson Missile Mechanic - Electrical	34
Azael Uranga Design Drafter	36
Oscar L. Wertanen Missile Checkout Electrician	36
Werner A. Wherry Drill Operator - Major Assembly	22
Joseph H. Wilson Manufacturing Dispatcher	35
John J. Zathan Material Project Administration	36

Quality Forum Returning

Quality Forum, a former newsletter of Operations and Quality Assurance, is being resurrected as a quarterly publication. Its success depends upon your input as employees of these departments.

Watch for flyers and posters regarding the *Quality Forum*. Direct your articles, questions, and comments to Fran Richardson, 26372.

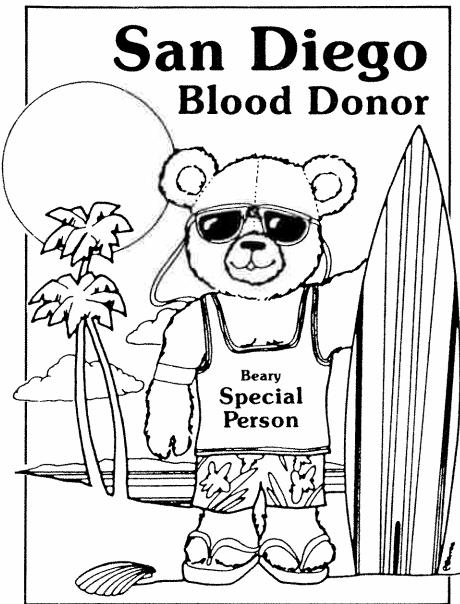
CONVAIR

WEEKLY LOG

March 9, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Be a "Beary Special Person" to someone in need. Donate blood and receive a free "Beary Special Person" T-shirt from the San Diego Blood Bank.

Beary Special Blood Drive

Become a "Beary Special Person!" Join the Convair, Space Systems, and DSD-Western Center Blood Drive, March 23-27. Did you know that:

- The San Diego Blood Bank is the only source for all 30 San Diego County hospitals.
- Donations for 300 pints a day are required to meet the community's needs.
- General Dynamics is the largest private contributor in San Diego County.

Call today to reserve a time to donate blood during the drive.

• Kearny Mesa — March 23 & 24

8:00 a.m. to 1:00 p.m.
Call 73820 for reservations.

• Lindbergh Field — March 25 & 26

8:00 a.m. to 1:00 p.m.
Call 28244 for reservations.

• Plant 19 — March 27

8:00 to 4:45 p.m.
Call 28244 for reservations.

• Sycamore Canyon — March 26

8:00 a.m. to 1:00 p.m.
Call 57134 for reservations.

Convair New Employee Orientation Change

Effective today, Convair's New Employee Orientation session held at Kearny Mesa, Building 17, Room 1, will be conducted every other Monday. After today's orientation, the next session will be on March 23. The Lindbergh Field sessions will continue to be held in Building 14 auditorium on the third Friday of each month.

The orientation classes have been extended to include corporate-mandated training on hazardous materials. The sessions are now held from 8:00 a.m. to 3:00 p.m.

UCSD Medical Center Lectures

A Healthier Lunch Break

Black Angus, Tummy Buster's, Mr. G's, McDonald's . . . Why not break your old routine March 16 through 20 and spend your lunch hour at Kearny Mesa in Building 25 Conference Room? It promises to be healthful. Experts from UCSD Medical Center will present lectures from 11:45 a.m. to 12:30 p.m. each workday on a variety of health care topics. The menu reads:

Monday, March 16 — *Osteoporosis - Assessment and Prevention*.

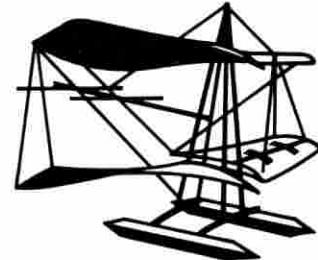
Tuesday, March 17 — *Advances in Cancer Research*.

Wednesday, March 18 — *Diet for a Healthy Heart*.

Thursday, March 19 — *Who is in Control of Your Life?*

Friday, March 20 — *Staying Healthy While Aging*.

The medical experts will help satisfy your intellectual appetite; you are welcome to bring a brown bag lunch to satisfy your stomach.



A Glance at History

Connections

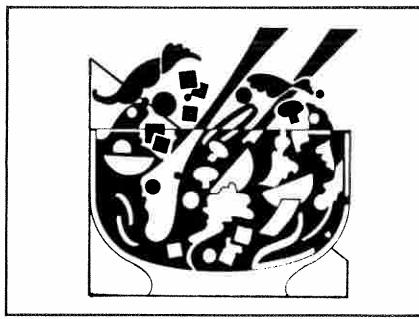
Connections is an eyecatching publication. Tiny peach images of the Gallaudet Glider are found on the cover. Superimposed on the prints, written in rich brown ink, are highlights of the beginning of the Convair Division. Below, peach and brown stripes flow from page to page, linking together the various phases of Convair's history.

Multicolor illustrations of the Gallaudet Glider (1898), PT-1 Trainer (1923), X-PBY flying boat (1929), B-24 Liberator (1940) and the Flying Car (1942) accompany the inside text. The brochure spotlights today's progress — the Sea-Launched Cruise Missile, the Boost Glide Vehicle, the MD-11 commercial airliner and the Paperless Factory System.

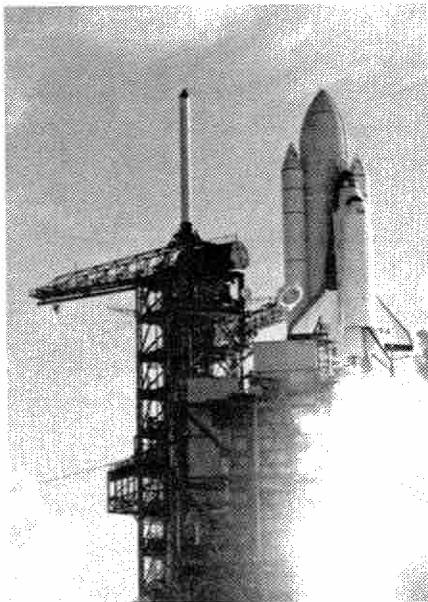
Connections has just been released by the Productivity office. Department representatives will coordinate distribution of the brochure to all Convair employees.

Wanted: Convair Cost Development Engineers

Currently there are positions available in the Convair Engineering Cost Analysis group for Cost Development Engineers. The primary functions are to develop cost estimates and rationale for performance of engineering tasks associated with change proposals, and coordinate and be responsible for the completion and accuracy of cost proposals for new and follow-on business. Requirements include 2-5 years experience in an engineering discipline with some business interface. B.S. degree in engineering, industrial technology, statistics or mathematics required. Interested individuals may apply through the Professional Enhancement Program (PEP).



WELCOME DIS & ACM INSPECTION TEAMS



NMA Space History Night

Astronaut Brewster Shaw, pilot and commander of two Space Shuttle missions, will be the guest speaker at the National Management Association Space Systems Chapter (NMASSC) on March 12 at the San Diego Hilton Hotel.

Social hour will begin at 5:00 p.m. and dinner will be served at 6:15 p.m. Tickets are available from NMASSC boosters. Prices are \$15 for members, \$18 for non-members.

Contact Glorene Anderson, 75577, for more information.

New Convair Timekeeping Hours

The Convair Timekeeping hours for the three plants are:

Lindbergh Field

Monday	5:00 a.m. - 1:00 p.m.	6:00 a.m. - 2:00 p.m.	6:00 a.m. - 2:00 p.m.
Tuesday through Thursday		7:00 a.m. - 3:30 p.m.	7:30 a.m. - 4:00 p.m.
	6:00 a.m. - 4:30 p.m.		
Friday	9:00 a.m. - 5:30 p.m.		9:30 a.m. - 6:00 p.m.
Saturday	6:00 a.m. - 10:00 a.m.	8:00 a.m. - 5:30 p.m.	6:00 a.m. - 10:00 a.m.

Plant 19

Kearny Mesa

Congratulations, Graduates!

Education plays a key role in your personal and professional growth, and the following Convair and Space Systems employees have demonstrated their commitment to excellence by spending many of their evenings and weekend hours attending college classes. We congratulate them for receiving their degrees.

Name & Department

Michele Brannon	(638-0)
Andrew T. Johnson	(850-0)
Gerry W. Fay	(358-0)
Joseph Gallagher	(197-0)
Alan W. Eft	(262-0)
Lori Gorski	(830-2)
Dan Shapero	(194-4)
Stephen Ornelas	(437-0)
Susan Wessman	(621-1)
Karl Spishock	(451-0)
Glen Mickowski	(050-0)

Degree & School

BA, National University
Masters in Military Science, Air Command and Staff College, USAF
BS, University of Redlands
MBA, University of San Diego
MS, National University
BS, University of Redlands
MA, San Diego State University
AS, San Diego City College
MS, University of California, San Diego
BS, National University
MBA, National University



Leprechaun Celebrity Night

The National Management Association Convair Chapter will host *Leprechaun Celebrity Night* Tuesday, March 17 at the La Jolla Marriott Hotel. The date was incorrectly reported in the *Managair*.

Comedian Pat Paulsen will be the guest speaker at the event. Social hour will begin at 5:30 p.m., and dinner follows at 6:30 p.m. Tickets are \$9.95 and are available from your NMA booster.

Call Hildy Mehuron, 78402, for more information.

Ethics Dilemmas

Q. Can an employee attend a supplier-sponsored seminar workshop?

A. Yes, providing the following criteria are met:

- The seminar should provide information or professional skills which are of immediate value to the Company.
- The immediate purpose of the seminar should be to provide information and product awareness. There should be no obligation to buy or to commit or to follow up.
- The seminar should be open to the public, or at least the buying public.
- The agenda of the meeting and the setting should be business-oriented, not pleasure-oriented.

If you have any questions, contact the Ethics Hotline: Convair, 38120; Space Systems, 38367.



Gloria Sobol is presented her Apprenticeship Completion Certificate as a Milling Machine Machinist by Rodger Betts, general operations supervisor (right), and Jim Faulkner, project representative. She has completed four years of on-the-job training and earned her Associate's Degree in Manufacturing Technology.

Expense Report Change

Effective Wednesday, March 11, the Convair employee on travel must submit hours worked by date and by work order or account number. Each day is to be listed separately on the expense report and the date placed in the "amount" column. Example: 03111987.

A new revised expense account form will be issued in a few weeks. If you have questions, contact Travel Audit, 24624.

Just a Reminder



The deadline for submitting the National Management Association Convair Chapter scholarship applications is April 1, 1987. Applications are available through the NMA chapter secretary, Barbara Fager, 39937.

Time Running Out for Merchandise Awards

Attention, Convair Excel, Extraordinary Achievement Award and Project/Target Teamwork recipients: time is running out to redeem your award checks. All merchandise awards issued in 1986 will expire at the end of this month, March 31, 1987. Plan ahead and order your gift(s) today.

Employment

For the week ending February 27, Convair Division employment was 8,944; Space Systems Division employment was 2,768.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330. Managing Editor: Cal Samuels Production Editor: Bruce Macdonald Assistant Editor: Theresa Scherer Design/Layout: Bill Ferebee Compositor: Dianna Rich

CONVAIR

WEEKLY LOG

March 16, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Atlas/Centaur 68, the last delivery under Space Systems' current NASA contract, departs for Miramar Naval Air Station for loading on board an Air Force C5-A for its trip to Cape Canaveral.

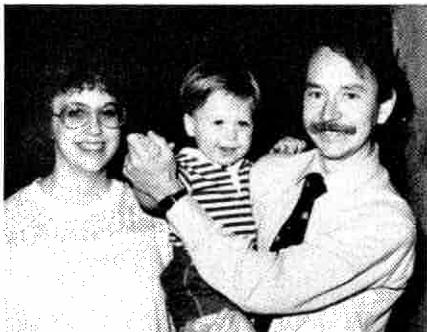
Beginning of a New Era

Delivery of Atlas/Centaur 68 marks the end of one era and the beginning of another. This last Atlas/Centaur to be delivered under Space Systems' long series of NASA contracts was shipped to Cape Canaveral last week to be used to launch a Fleet Satellite Communications spacecraft in June.

Future Atlas/Centaur sales may be made directly to customers on a commercial basis. General Dynamics decided to proceed with commercialization of Atlas/Centaur

in spite of the recent Medium Launch Vehicle (MLV) loss. This important decision was based on the emerging market for launch service requirements in Atlas/Centaur's payload weight class. These are payloads too large for the Delta II MLV.

Proposals are being prepared and submitted for EUTELSAT and GOES space-craft. A total of 45 potential payloads from 1989 through 1994 are being pursued. First launch of a commercial Atlas/Centaur is expected in October of 1989, with launch rates of at least four per year.



Judy, Joseph, and Steve spend a happy moment together.

Frustration, Anger — and Love

Joseph Gallup's Progress

by Theresa Scherer

A red balloon with Joseph's name hangs from a lightpost outside the entrance to Steve and Judy Gallup's Linda Vista condominium. Its purpose, I discovered, was to direct the 50 volunteers who donate a total of 85 hours each week to the Gallups' son, Joseph.

The day I saw two-year-old Joseph, three Convair Art & Editorial employees, Beverly Kinzie, Dianna Rich, and Ruth Wenger, were working with him. "Judy

and Steve showed us the correct movements," Dianna said. "Anyone can learn them in a couple of minutes." They were moving his head, arms, and legs in a specific crawling pattern. Dressed in a blue-striped shirt and shorts, the blond youngster looked like a typical child.

But Joseph is special. He was born with a moderate mid-brain injury. His motor skills, respiration, hand control, and vision are impaired.

The exercise I witnessed was part of an intensive home training program designed by the Institutes for the Achievement of Human Potential in Philadelphia. The program requires 12 five-minute patterning sessions per day, the application of a plastic oxygen mask for 60 seconds every eight minutes, exposure to word cards, and crawling sessions. How does the patterning work? Basically, it tells the brain, "This is how it feels to crawl." It creates new motor pathways in the brain.

The training is extremely time-consuming, but Joseph's parents have committed themselves to helping him overtake his age group. Theirs is a story of frustration, perhaps even some anger, but — always — one of love.

Still Time for Blood Donors to Sign Up

Convair, Space Systems, and DSD-Western Center employees can still make an appointment to donate blood next week. Active employee participation makes it possible to provide replacement services to employees and eligible dependents while providing a community service as well.

San Diego Blood Bank T-shirts will be given to all donors. Please call now to make an appointment.

Kearny Mesa — March 23 & 24

8:00 a.m. to 1:00 p.m.

Call 73820 for reservations.

Lindbergh Field — March 25 & 26

8:00 a.m. to 1:00 p.m.

Call 28244 for reservations.

Sycamore Canyon — March 26

8:00 a.m. to 1:00 p.m.

Call 57134 for reservations.

Plant 19 — March 27

8:00 to 4:45 p.m.

Call 28244 for reservations.

The first indication that something was wrong came when Joseph didn't reach expected developmental milestones. Impatience led to anxiety. Dissatisfied with the doctors' prognosis, the parents decided to assume responsibility for Joseph's recovery.

Judy left her job with General Dynamics and assumed the full-time task of training Joseph. Steve, a proposal editor for Space Systems, helps her during lunch breaks and after work hours. From the beginning, they realized they couldn't do it alone.

"We knew we had to get other people involved to make the program work," Judy said. The Gallups are hopeful that their son will be normal within two years. Already, he can crawl the length of seven football fields during one day's time.

Despite the constant demands Joseph's program places on the Gallup family, there are normal times between mother, father, and child. "Give Daddy a hug," Steve says as he lifts his son high. Joseph laughs; his parents smile.

Joseph's progress is due not only to the devotion of his parents, but also to the commitment of the many volunteers who dedicate their time to his improvement. If you would like to help Joseph, call Steve and Judy at 565-4500.



March of Dimes Ambassador Erin Faralan (center) poses with WalkAmerica/TeamWalk team leaders Kayanne Edmonds and Cal Samuels.

March of Dimes TeamWalk

The March of Dimes will host WalkAmerica/TeamWalk on Sunday, April 26, to raise funds for research and education to help prevent birth defects.

Companies participate in TeamWalk by having employees solicit sponsors for cash contributions on a per-kilometer-walked basis.

Let's show our company spirit and community involvement by supporting TeamWalk.

Call 68704 or 39955 for information or sponsor sheets.

Government Service Update

On January 20, 1987, a follow-up survey to determine prior U.S. Government service (military and civilian) was distributed to Convair's salaried exempt employees. The data collected will be used to remind certain former government employees of their requirement to file annual Department of Defense reporting forms.

There are still many employees who have not returned their survey form. The form must be signed and returned to Professional Staffing, MZ 11-1340, by Friday, March 20, even if corrections are not needed or you were not a government employee. Members of Professional Staffing will be conducting follow-up activities to ensure 100% return of this important information. If you have questions, call 39493 or 38128.



PBS Special Broadcast

Sea Dart

In 1946, engineers toy with the concept of building a jet aircraft that could operate on water. One thousand Convair engineers and 1,500 craftsmen pool their talents. From their blueprints, a one-tenth scale model is built. It's tested, technology is honed, and procedures established for the real thing.

In 1952, amidst a spray of ocean water, an aircraft lands in San Diego Bay. Testing of Sea Dart, the world's first supersonic water-based defense airplane, has begun.

The most unusual characteristic of the seaplane is the retractable hydro-ski for takeoff and landing. A double ski is first used, but sets up such serious vibration that designers switch to a broad single ski. Four of the new Sea Darts are built.

On November 4, 1955, a Sea Dart crashes, killing the pilot. The program is terminated.

Public-access cable TV will soon feature a special on the Sea Dart. PACE-TV has interviewed B.J. Long, Ernest Stout, and Bill Chana for insights into the design and production of the unique plane. Film clips of actual test flights will also be featured. Broadcast times are: Southwestern Cable (Channel 15): 5:30 p.m. on March 23 and March 30; Cox Cable (Channel 24): 6:00 p.m. on March 31, April 7, and April 14.

Just a Reminder

There will not be a Convair New Employee Orientation session today. The next session will be March 23, at 8:00 a.m. in building 17, room 1.

Convair's New Tuition Reimbursement Policy

Personnel Administration Manual (PAM) 1-4, "Educational Assistance," has been rewritten to reflect new policies and procedures.

Employees interested in educational assistance or who are already approved for educational tuition assistance should read the new PAM 1-4 to familiarize themselves with the current eligibility requirements and the procedures now required for submitting tuition refund requests for payroll reimbursement.

Employees approved for educational assistance before February 16, 1987, will also be processed under the new policy until the completion of their degree plan or until the reevaluation date indicated in their approval letter.

For information concerning the educational assistance policy, call 39950. All tuition refund requests should be sent to MZ 33-1320 for processing.

Space Systems PC Helpline

If you have more questions than answers when it comes to operating your personal computer (PC), don't despair: call 77193.

Space Systems Information Resource Management has established a PC Helpline to assist employees with personal computer-related questions. Janie Minguillon, a DSD Infonet representative, monitors the helpline and is available to answer PC questions.

What's Happening to the Bluesheet?

In an effort to enhance the quality and content of our newsletter, several changes will occur over the next few weeks. Watch for these improvements.

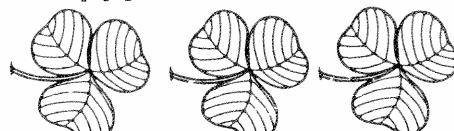
Employment

For the week ending March 6, Convair Division employment was 8,983; Space Systems Division employment was 2,754.

New Switchboard Hours

General Dynamics switchboard hours are now 7:00 a.m. to 5:30 p.m., Monday through Friday. If you have people on travel or offsite, please let them know.

Happy St. Patrick's Day!



New Convair Timekeeping Hours

The Convair Timekeeping hours are:

Lindbergh Field

	Plant 19	Kearny Mesa
Monday	5:00 a.m. - 1:00 p.m.	6:00 a.m. - 2:00 p.m.
Tuesday through Thursday	7:00 a.m. - 3:30 p.m.	7:30 a.m. - 4:00 p.m.
	6:00 a.m. - 4:00 p.m.	
Friday	9:00 a.m. - 5:30 p.m.	8:00 a.m. - 5:30 p.m.
Saturday	6:00 a.m. - 10:00 a.m.	Closed
		9:30 a.m. - 6:00 p.m.
		6:00 a.m. - 10:00 a.m.

Questions concerning Timekeeping issues should be directed to:

- Your timekeeper
- Gene Hughes, supervisor of Timekeeping: KM, 73372; LF, 28626
- Convair Labor Charging Helpline, 24647

CONVAIR

WEEKLY LOG

March 23, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Direction Set for Cost-Competitiveness

The 1986 General Dynamics Annual Report is on its way to the homes of more than 100,000 employees. As can be seen on the cover (reproduced here on page 2), the direction set for 1987 is to "achieve excellence in cost-effectiveness and cost-competitiveness." This message comes from Stanley C. Pace, chairman and chief executive officer.

"Our customer, the government, is steadily increasing its pressure on the defense industry to reduce the cost of manufacturing, maintaining, and operating its weapons systems," Pace says in the annual report. He then discusses some of the recent approaches in defense procurement that have created the "new realities of the defense environment, an environment pervaded by a growing emphasis on competition and cost-consciousness." Pace adds, "It is our task to deal with these realities, and we are doing so."

To reinforce the emphasis placed on this objective in the annual report, Pace recently called together managers from throughout the company to discuss the situation. One result was a commitment by the general managers that they would work within their organizations to help meet this challenge.

We were among the group of executives at the meeting with Stanley Pace, and together we share this message with employees:

"We've stressed the need for cost-competitiveness for years, but the government is now giving this a higher priority than ever before. Congress has tightened its hold on the amount of money being allocated for the defense budget. Manufacturers are now expected to take on more and more of the front-end development costs, without assurance they'll get a return on that investment.

"In addition, the industry is getting more competitive every day. The key to our leadership position is to continue to look at all areas of our operations and come up with new ways to reduce costs. To do this we are soliciting the ideas of all employees."

As Pace states in the annual report, "Our goal to become more competitive ultimately rests on the skill and innovation of our people."

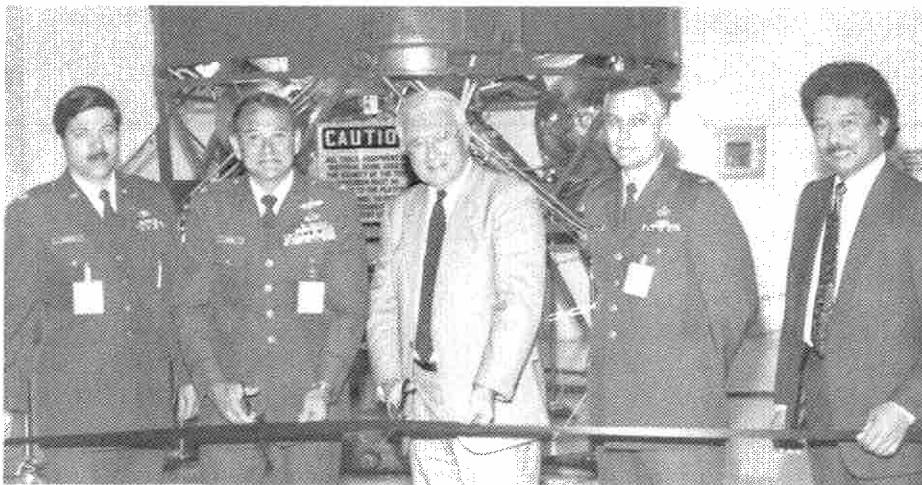
In future issues of the Weekly Log, we'll keep you informed about these and other issues facing our business, as well as recognizing efforts that are helping us meet the cost-competitiveness challenge.



Mike Keel
Acting General Manager
Convair Division



Alan Lovelace
General Manager
Space Systems Division



Attending the ribbon-cutting ceremonies at the new Acoustic Thermal Test Facility are (from left) Lt. Col. James O. Rogers, Col. Donald Hard, Space Systems General Manager Alan Lovelace, Col. Stephen Richards, and Andy Calimbas.

Security Alert

General Dynamics employees have reported suspicious phone calls by someone who misrepresented himself, used a phony name, passed himself off as another General Dynamics employee, and made similar assertions. In response to this situation, it's worth reemphasizing the basics of telephone security:

- Never discuss classified information on the telephone.
- Don't give out information in response to a general inquiry about an employee or company business.
- Don't disclose information regarding an employee's travel plans or scheduled itinerary.
- Don't release an employee's home address, telephone number, or other personal information.

Reminder: General Dynamics telephone directories are for internal use only and should not be given to anyone outside General Dynamics without permission of Industrial Security.

Acoustic and Thermal Test Facility Completed

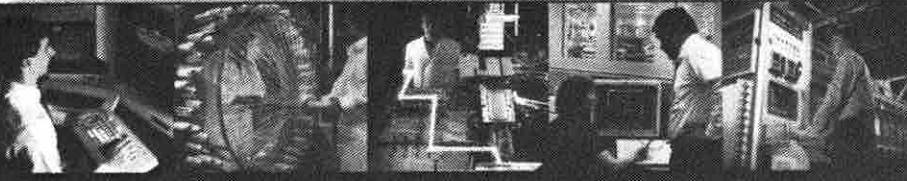
Ribbon-cutting ceremonies were held March 12 in the Acoustic and Thermal Test Facility at Kearny Mesa. In his welcoming address, Space Systems General Manager Alan Lovelace said, "This facility is one of the world's largest integrated high-intensity acoustic and temperature cycling chambers now in operation. It will significantly enhance our industry's test standards in support of the goals of the United States Space program."

The facility was designed to test the Centaur launch vehicle and next-generation spacecraft in temperature and sound conditions simulating those found at liftoff and during other operating modes.

Its completion was made possible through the combined efforts of Space Systems Division, NASA, and the Department of Defense.

The facility houses a 65,000-cubic-foot acoustic chamber that can generate sound levels up to 154 decibels (dB). For comparison, average traffic is 75 dB and a sonic boom is 130 dB. The second com-

General Dynamics 1986 Annual Report



"Historically, General Dynamics has performed in an outstanding manner in technical matters."

"Recently, we have substantially improved our performance in administrative matters."

"Now, in addition to maintaining excellence in technical and administrative matters, we must achieve excellence in cost-effectiveness and cost-competitiveness."

plant from 4:30 p.m. to 7:30 p.m. twice a week. Each course is completed in eight weeks (16 sessions). Participants are also required to attend fourteen 2½-hour sessions (after hours, inplant) of Convair-specific subject material. An employee can successfully complete all program requirements within thirteen months.

Tuition is fully reimbursed upon successful completion (grade C or better) of each course. Participants who complete the program can apply course hours toward the 60 hours required for an associate's degree if they wish.

Course Content

- 101. Introduction to Supervision
- 170. Effective Speaking for Supervisors
- 105. Human Relations
- 130. Effective Writing for Supervisors
- 115. Management and Organization for Supervisors
- 120. Instructor Training for Supervisors
- 215. Labor-Management Relations for Supervisors
- 150. Convair-Specific

In addition to the core curriculum, participants can gain additional units through participating in the work experience program (270. Work Experience).

Classes are held at Lindbergh Field, building 14, room 5, after hours, Tuesday and Thursday from 4:30 to 7:30 p.m. Classes start March 31.

The Convair-Specific course is held at Kearny Mesa, building 17, room 6, after hours, Monday from 4:30 to 7:00 p.m. Classes start March 30.

For further information, call Management Development at 39938.

partment, a 46,500-cubic-foot temperature chamber, can cycle large test articles between minus 45°F and plus 185°F at a rate of one degree per minute.

Test articles requiring sequential acoustic and thermal testing can be moved quickly from chamber to chamber via an interconnecting bridge crane.

The facility can now monitor a test article's reaction to controlled vibration and thermal stress. In fact, a special digital acquisition system permits viewing stress data only a few seconds old.

Both test chambers and the connecting staging area are controlled as clean-room areas so that spacecraft cleanliness requirements can be maintained, even during transfers between chambers.

Representatives from Space Systems, other defense contractors, NASA, and the U.S. Air Force attended the ribbon-cutting ceremonies.

The guests included Lt. Col. James O. Rogers, USAF; Andy Calimbas, Space Systems; Col. Donald Hard, USAF; and Col. Stephen Richards, USAF.

Interested in Pre-supervisory Training?

Convair, in association with San Diego City College, has developed a new Pre-Supervisor Training program. This program provides insight into the functions and concepts of supervision and the role of the supervisor in the organization.

The Pre-Supervisor Training program is fully accredited and meets all academic requirements of City College. Upon successful completion, students will receive a Certificate of Achievement from San Diego City College.

The program is designed to accommodate an employee's work schedule. The format consists of seven courses held in-

Blood Drive Begins Today

Please remember your appointment.

Kearny Mesa Fire Station

March 23 & 24
8:00 a.m. to 1:00 p.m.
Call 73820.

Lindbergh Field Fire Station

March 25 & 26
8:00 a.m. to 1:00 p.m.
Call 28244.

Sycamore Canyon Mobile Unit

March 26
8:00 a.m. to 1:00 p.m.
Call 57134.

Plant 19 Mobile Unit

(Outside building 4)
March 27
8:00 a.m. to 4:45 p.m.
Call 28244.

Pick up your "Beary Special Person" T-shirt when you donate.



This group of Ethics Fellows from Integrated Logistic Support represents the many Convair people who received recognition for their participation in the Ethics Awareness program. (From left) Lee Bolt, Jack Yonke, Jim Diaz, Barbara McDonald, Jan Lundy-Lufer, and Convair Acting General Manager Mike Keel.

Convair Ethics Fellows Receive Recognition

Citing a letter of appreciation from Corporate Ethics Director Kent Druyvesteyn, Convair's Ethics Program Director John Barrons extended kudos to the 110 Convair Ethics Fellows who were honored at a recognition breakfast on March 12 at Kearny Mesa. The ceremony was held in honor of the many Convair people who had responded to the challenge of facilitating and training nearly 9,000 employees during the corporate-wide ethics awareness workshops.

Mike Keel, acting general manager, was on hand to present the Ethics Program Fellow certificates provided by the General Dynamics corporate office and signed by Chairman Stanley Pace. "More than 99,000 General Dynamics employees have received ethics awareness training from Hong Kong to Europe in over 5,000 individual sessions," Keel said. "General Dynamics is recognized as a leader in awareness of business conduct. Our program has wide visibility." Keel attributed the success of the program to the dedicated efforts of people like the Convair ethics facilitators who were being recognized.

"The key word for our 1986 ethics training objectives was 'awareness,'" Keel said. "Our people's ethics were never questioned, but we wanted everyone to know the importance of exercising sound judgment in solving ethical dilemmas. In 1987, we will focus on new employees and develop in-depth training for areas such as marketing, procurement, and contracts."

In closing, Keel repeated Stanley Pace's comments: "I'm very pleased with the manner in which the program was presented and how it has been accepted by our customers, our suppliers, and more importantly, by our employees. But we must con-

tinue with the awareness that was established during 1986, maintain the knowledge levels, stay abreast of changes in our society (rules and regulations, acquisitions, and government policies) to ensure our continued excellence in products and administration. With your help, we can continue to grow and prosper both as a company and individually. Your responsibility in the Ethics Awareness program is tremendously important. Thank you."

Space Systems Tuition Reimbursement

On April 1, Space Systems Training & Development will require that a receipt for tuition paid be submitted with all Tuition Reimbursement Request forms. This documentation is necessary so that you will be eligible for tuition reimbursement. If you have questions, call Training & Development at 77455.



As American As . . .

The combined 1987 Convair, Space Systems, and DSD-Western Center US Savings Bond Drive will be held April 6-17. Watch for more information.

Thanks, KPBS Telethon Volunteers

Convair, Space Systems, and DSD Western Center employees recently participated in a KPBS telethon sponsored by the National Management Association Convair Chapter. Take a bow, all of you who volunteered your time to perform outstanding community service.

February Retirees

Thanks and best wishes for a happy retirement to these employees who retired in February.

Name (Classification)	Years of Service
Allen A. Adams Publication Specialist	27
Harold Baumann Estimating Specialist	32
George R. Bell Plaster Processor	45
John R. Cash Publications Chief	29
Boniface W. Ciesielski Bore Mill Machinist	8
Milton P. Dukeck Engineering Specialist	13
Robert W. Eilers Engineering Specialist	26
Antonio F. Estrada Launch Service Floor Mechanic	11
James L. Gardner Project Engineer	25
Kenneth E. Gooden Tool & Operator Planner	15
Francis A. Hepburn Engineering Specialist	20
Albert E. Hunt Engineering Specialist	25
Bill A. Jones Photographer	31
Pauline S. Kelly Data Entry Systems Operator	34
Don E. Leinweber Human Resources Specialist	40
Antonio Martinez Group Leader	31
Joan McAfee Procurement Analyst	13
Robert C. Moore Product Planner	9
Anita Munchwiler Timekeeper	30
Z. Henry Hyman Director of Productivity	29
Robert C. Parker Loft Developer	3
Edgar F. Roberson Tool Designer	35
George A. Ryan Engineering Illustrator	7
Terrance O. Sather Operations Supervisor	45
Robert E. Strasser Quality Engineer	3
Edward G. Wendorf Logistics Specialist	5
George E. Wilson Logistics Administrator	36

Walk America

TeamWalk

Step Out with March of Dimes

WalkAmerica

On April 26, hundreds of Convair employees, families, and friends will be walking as a team for the annual March of Dimes WalkAmerica/TeamWalk. This event is the March of Dimes' largest fund raiser — a 32-kilometer walk (or any distance up to 32 kilometers) for pledges to raise money to benefit the fight against birth defects. Pledge money is accrued on a per-kilometer-walked basis. Convair TeamWalk T-shirts will be given to walkers who join our team. Sponsor sheets may be obtained at the following locations.

- Kearny Mesa — CRA Health-Fitness Center, Community Relations (building 1, first floor).
- Lindbergh Field — Employee Benefits.
- Plant 19 — Entrance gates.

For information, call 68704 or 39955.



Don Whisler accepts his award from Capt. John Lester. Capt. Joe Berkley and Dan Kaelin look on.

Navy Reserve Shows Appreciation

Each month, Dan Kaelin, senior financial analyst — Finance, exchanges his civilian clothes for those of a U.S. Lieutenant Commander. He can do it because his supervisor, Don Whisler, Convair's director of Financial Management, supports the Reserves.

On March 13, the Navy demonstrated its appreciation when it awarded Don the Department of Defense Certification of Appreciation for support of the U.S. Naval Reserve. Capt. John Lester, USNR, commanding officer, Naval Sea Systems Command Reserve, Detachment 419, presented the award.

"We are here to recognize General Dynamics for its support of the activities of the Reserve force," Lester said. "The mutual support of supervisors like Don and companies like General Dynamics make the Navy Reserve the vital component that it is."

Support from employers is critical to 1.4 million men and women who serve in the National Guard and Reserves. Unless allowed time off for training, guardsmen and reservists cannot meet the requirements imposed by high-technology equipment and new missions.

Attending the ceremony were Lester; Capt. Joe Berkley, executive officer, USNR; Dennis Coffee, manager — Finance; and Bill Crooks, chief — Finance.



Shown here are the apprentices (holding certificates) and their supervisors. From left: Glen Gill, Randy Carter, Bruce Nameth, Dan Owens, Larry Robak, and Drew Milner.

Apprentices Complete Training

Three Convair apprentices recently received their Completion Certificates after four years of on-the-job training and course work at San Diego City College. Randy Carter is graduating as a jig and fixture builder, Drew Milner as a machinist, and Dan Owens as a tool and die maker.

Safety Award of Distinction. Keith Meholic, senior safety engineer, accepted the award from Kennedy Space Center Director Lt. Gen. Forrest McCartney, USAF.

ESMC was recognized for meeting Kennedy Space Center's safety record criteria in the areas of lost-time injuries, work days lost, vehicle accidents, management/employee support, compliance with safety policies, job surveillance, workplace inspections, and report timeliness.

Congratulations to all ESMC employees for a job well done.



Dave Baxter, supervisor — Engineering Forecasting (left), and Durwood English, manager — Engineering Forecasting (right), present Rod Winter and Martha Kennie with their awards.

Excellence Rewarded

Convair Engineering Forecasting's Rodney Winter and Martha Kennie recently received Extraordinary Achievement Awards (EAA).

EAA is a motivational program designed to recognize employees whose contributions far exceed usual job expectations.

Martha played a vital role in establishing Space Systems' full-service Work Authorization Plan Processing Center. She set up the report distribution cycles, data input and output schedules, trained center personnel, and identified equipment and facilities requirements.

Rod was recognized for his contribution to the critical area of Cost/Schedule Control Systems Criteria (C/SCSC). Besides contributing expertise in C/SCSC application and administration, he has put together a preparation class and a training package on the C/SCSC management and reporting requirements.

As EAA awardees, Martha and Rod received a certificate and credit points redeemable for selected gifts.



Lt. Gen. Forrest McCartney (left) presents Keith Meholic with the 1986 Safety Award of Distinction.

Excellence in Safety at Cape Canaveral

Eastern Space and Missile Center (ESMC) employees were recently awarded the 1986

Employment

For the week ending March 13, Convair Division employment was 8,985; Space Systems Division employment was 2,763.

CONVAIR

WEEKLY LOG

March 30, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Focus on Your Future

U.S. Savings Bond Campaign April 6-17

The combined Convair, Space Systems, and DSD-Western Center U.S. Savings Bond Campaign kicks off next week. Between April 6 and 17, you will have the opportunity to enroll in our U.S. savings bond payroll savings plan. If you are already enrolled in the plan, you'll have the opportunity to increase your savings.

Unlike the interest rates offered on earlier bonds, the Treasury Department pays interest on Series II bonds based on the current market rates. The interest is compounded semiannually and paid when bonds are redeemed. Your investment is guaranteed to earn at least 6%.

Spotlight on Campaign '87

To get you really interested in bonds, this year's campaign features daily prize drawings for all current and new bond purchasers beginning Tuesday, April 7. If you are a long-time bond purchaser, your name is already entered in the prize drawing and you will have a chance to win prizes every day during the campaign. If you do not already participate in the bond program, the sooner you sign up, the more chances you will have at winning one of these prizes:

- Padres tickets
- Dinners for two
- CRA memberships
- Disneyland tickets
- Gift certificates (VCRs, cameras, etc.)
- Membership in the San Diego Zoological Society
- And much more!

The grand prizes will be awarded at the end of the campaign.

Fun • Challenge • Prizes

Join WalkAmerica/TeamWalk

On Sunday, April 26, thousands of San Diegans will be stepping out to aid in the fight against birth defects. This event — the March of Dimes' largest fund-raiser — is the 32-kilometer WalkAmerica/TeamWalk that begins on Fiesta Island.

Convair is participating in the TeamWalk by having individuals solicit sponsors for cash contributions on a per-kilometer-walked basis. The event is not a contest to determine who can walk the fastest or farthest, but rather a fun occasion to raise funds for a worthwhile cause. You may walk a few kilometers or the entire route. It's up to you.

This year's Convair team is being coordinated by the National Management Association Convair Chapter (NMACC) and Convair's Community Relations office. The NMACC will be giving presentations this week to provide information about the



U.S. SAVINGS BONDS

Invest in Your Future

TeamWalk. The Kearny Mesa session will be held Wednesday, April 1, in building 5, Mockup Conference Room B. A similar session will be held at Lindbergh Field on April 2 in the building 14 auditorium. The presentations will be repeated continuously from 11:00 a.m. to 1:00 p.m., so your presence will only be required for a short period. Bring your brown bag and join the team. A March of Dimes representative will be on hand at each session.

Each TeamWalk participant will receive a free ticket to a Padres game, discount coupons to Sea World, free refreshments, and more. You also will be eligible to receive prizes (based on amount raised) ranging from March of Dimes T-shirts to a vacation in Puerto Vallarta.

Convair TeamWalk T-shirts will be given to our people who show up on the day of the event. Why not make this a family affair?

For sponsor sheets and more information, call 68704 or 39955.

Convair's TDC Reviews Improve

The discrepancy rate for Convair TDCs has greatly improved over the past two months. In March, the rate was 3.9% — well below the corporate goal of 5%.

Congratulations to all employees for paying increased attention to TDC procedures. Keep up the good work.

Security Systems Approved

The Defense Investigative Service (DIS), after completing its recent semiannual inspection, gave our security system a satisfactory rating. In addition, the customer approved program security for ACM.

Congratulations to everyone who contributed to the satisfactory ratings.

Computer Technology on Display

See Apple's new Macintosh SE, Mac II, and MAC IIIGs at the Macintosh Productivity Fair on Saturday, April 11, from 9:00 a.m. to 7:00 p.m. in the CRA auditorium.

A variety of software and hardware for Apple personal computers will be displayed and demonstrated by 25 area vendors. The event, which is sponsored by the CRA Computer Club, Levco, Inc., and Apple Computer, Inc., will include presentations on the complete line of Mac products.

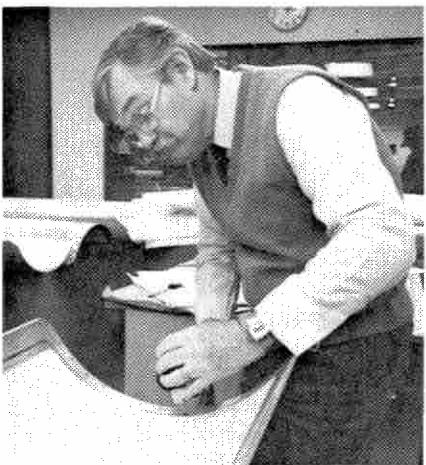
For more information, call William Birkner, 38928.

Parking Lot Reminders

All Convair and Space Systems people are reminded that marked handicapped parking spaces are reserved for the handicapped only. This is a state law that must be observed every day of the week, including weekends and during every shift. Violators' cars will be towed away at the owners' expense, without prior warning.

Speed limit regulations also must be obeyed in our parking lots. Pedestrians always are to be given the right-of-way.

Each of us is expected to obey traffic rules, and to exercise common sense and courtesy to ensure parking lot safety.



Morgan Leadley conducting an inspection.

Procurement Quality Assurance

All in a Day's Work

Morgan Leadley removed his suit jacket and placed it and his briefcase in the back seat of a General Dynamics company car before driving out of the Kearny Mesa plant. He arrived at his destination, a subcontractor, 20 minutes later.

Morgan is a Procurement Quality Assurance representative (PQAR). He has been one for the past five years. Business has brought him to this subcontractor, one of Convair's many suppliers. He is presented a stack of blueprints and purchase orders, which he spreads across a table to review. Occasionally, he pauses to ask the supplier's manager a question.

Then, he shifts his attention to the 10 Tomahawk parts that lie on the table be-

side him. He randomly selects four for inspection. Moving from piece to piece, he checks key spots against the blueprint specifications. Only when he finds variations in these critical points does he inspect the product 100%. "Variations," according to Morgan, "indicate there are problems in the vendor's hardware." As a PQAR, Morgan does not have the authority to second-guess the importance of variations. He must reject any supply if it fails to meet standards.

"I have to do the job I was hired to do," Morgan said. "I cannot let outside forces influence my decisions."

Morgan was hired to act as a liaison between vendors and Convair. He handles any problems relating to the vendor's quality program. He is the gatekeeper who prevents flawed supplies from entering Convair warehouses.

"The secret of being able to work successfully with a supplier is to have an academic background or practical experience in that field. A PQAR needs to be able to talk a supplier's language," Morgan said. "If suppliers are having problems with quality, we try to help them improve but we watch them closely."

Fortunately, these products pass Morgan's inspection. He stamps each part and the shipping orders with his PQAR stamp, completes more paperwork, then closes his briefcase and leaves.

Tomorrow, Morgan will fly to Salt Lake City, Utah, to inspect yet another supplier's products.



Laurence Luckinbill as Lyndon Johnson.

General Dynamics Sponsors "Lyndon Johnson" on KPBS

Lyndon Johnson's presidency began in the tragedy of John F. Kennedy's assassination and ended five years later in the tragedy of Vietnam. Yet his odyssey from an impoverished Texas childhood to the presidency and the founding of "The Great Society"

contained more than legislative programs, more than political campaigns, and more than American soldiers dying in the jungles of Asia.

There was Lyndon Johnson the relentless reformer, the tireless idealist, and the ruthless pragmatist. And, in the end, there was Lyndon Johnson, the agonized and discredited president, wondering whatever happened to all the grand dreams and ambitions he once held as a young boy in a small Texas town.

In a memorable, witty, and moving performance, actor Laurence Luckinbill brings to life the triumphs and tragedies of America's 36th President in the premiere presentation "Lyndon Johnson," airing on KPBS Wednesday, April 8, at 9:00 p.m.

The 90-minute program, underwritten by General Dynamics, marks the third in a series of one-man shows about leading 20th century political figures made possible by General Dynamics. Previous General Dynamics-sponsored broadcasts featured Robert Hardy in "Winston Churchill" and E.G. Marshall in "Ike."



Spring Forward, Fall Back. Don't forget to move your clocks ahead one hour when daylight saving time becomes effective Sunday, April 5, at 2:00 a.m. (Top) Rosemary Hopkins, Steve Gates, Jr., (bottom left) Cagie Tucker, Modesto Chavez, Vicki Ito, Leonard Gaines, and Barbara Smith.

Bulletin Board

Correction. In the March 16 *Weekly Log*, Rodney Winter and Martha Kennie were incorrectly identified. Both are members of the Engineering Forecasting team in Space Systems.

Take Note. The Travel Services telephone number is 77660.

Business Week Subscribers. If you recently subscribed to *Business Week* magazine through the NMACC, please make sure that all issues are mailed to your home address. If you listed your work address, please submit a change of address.

Weekly Log Deadline. If you have news or announcements that you want to run in the *Weekly Log*, the information must be received by noon of the preceding Tuesday at MZ 11-1330.

The Employee Assistance office has moved to Viewpoint Plaza, building 2, third floor. Their new telephone number is 576-8715 and their new mail zone is V2-1330.

Employment

For the week ending March 20, Convair Division employment was 9,005; Space Systems Division employment was 2,762.

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Managing Editor: Cal Samuels

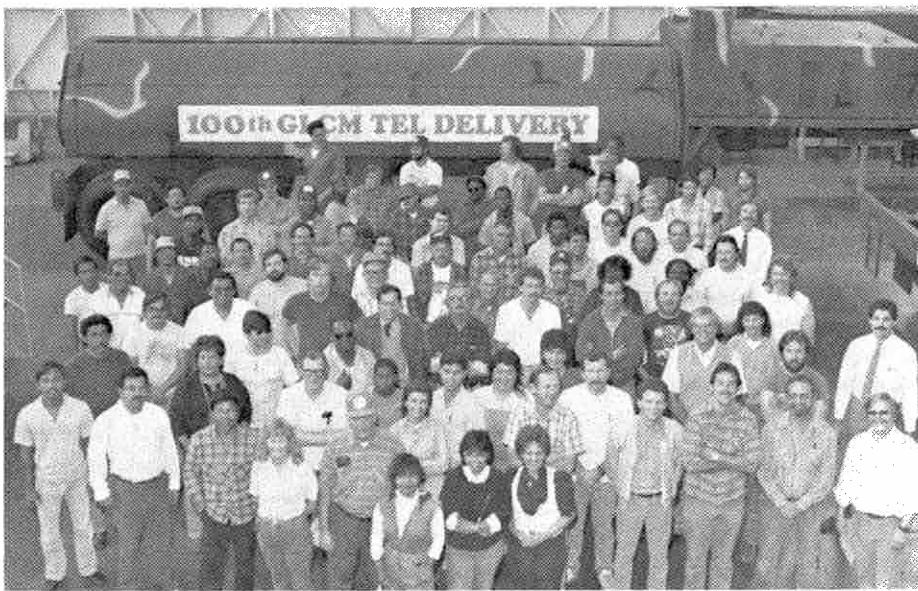
Production Editor: Bruce Macdonald

Assistant Editor: Theresa Scherer

Design/Layout: Bill Ferebee

Compositor: Diana Rich

Published by General Dynamics Convair & Space Systems Divisions



GLCM Team Delivers TEL 100

A special ceremony was held at Plant 19 on March 25 to commemorate the delivery of the 100th Transporter Erector Launcher (TEL) on the Ground-launched Cruise Missile (GLCM) production program.

TEL 100 was accepted by the Government on March 20, 1987, 11 days prior to the contract delivery date. Chuck Painter, GLCM Program Director, Ed Squires, Division Vice President-Cruise Missile Pro-

duction, and John Grando, TEL/LCC Production Manager, joined in congratulating all members of the GLCM production team who had an active role in TEL production.

The remaining production contracts call for 38 more TELs and 20 more LCCs to be built by May 30, 1988.

To mark the event, a key ring with a unique GLCM medallion has been ordered. Employees interested in obtaining one may contact the Convair Recreation Association, 39933.

grams to reduce premature births.

Prevention is a matter of changing the statistics, of increasing the proportion of babies born healthy, and of providing the resources that will give each baby the best chance for a healthy start in life. It can be done, but your support is needed. Step out and help! Join the team for WalkAmerica/TeamWalk. We'll be gathering at Fiesta Island on Sunday, April 26, to participate in a 32-kilometer walk, which is the March of Dimes' largest fund raiser.

Television, radio, and sports celebrities will be on hand to promote the event which includes music, entertainment, prizes, and free food. Each TeamWalk participant will receive a free ticket to a Padres game, discount coupons to Sea World, and a free painter's hat. Convair WalkAmerica T-shirts will be available to employees who show up on the day of the event.

For more information, call 68704 or 39955.

Exploratory Talks To Begin

Representatives of Convair and Space Systems will begin exploratory talks this week with committee representatives of the International Association of Machinists and Aerospace Workers.

Formal negotiations between the company and the IAM are scheduled to begin on May 21, 1987. The current agreement expires on July 15, 1987. The company requested the exploratory talks because we believe there are major issues to discuss and that having the additional time could be constructive.

AIDS: The Facts and Fears

An informational handout on the AIDS epidemic will be available at the entrance gates today. Written by Convair's Medical Director, Dr. E. Fisher Coil, the article discusses what AIDS is, how it was first noticed by the medical community, what causes it, how it is spread, how it is detected, and how it kills. He also offers medical advice on what employees can do to prevent this deadly disease.

Corporate Battle Kickoff

There will be an informational meeting Thursday, April 9, at 4:30 p.m. in the CRA Pavilion for anyone interested in participating, supporting, coaching or volunteering for the first-ever General Dynamics Sports Battle of the Divisions coming this summer. Sign-ups for divisional team try-outs will be taken throughout the presentation. Events include a 5K run, track and field, swimming relays, obstacle course, basketball and a tug of war. Top performers in this Battle of the Divisions will represent General Dynamics in the San Diego Battle of Corporations on September 26, 1987. Join us as we determine the most fit division around. For additional information, call 39921.

Parking Notice

Some of our employees have been parking on Complex Drive in the industrial area north of Convair Drive at our Kearny Mesa facility. This practice has resulted in parking and traffic problems for our neighbors, as well as jeopardizing the safety of our people crossing Convair Drive during rush hour.

Please refrain from parking in this area. We have ample parking in our own lots, and we need to maintain positive relations with our business neighbors.



When Convair, DSD, and Space Systems have a blood drive — they have a blood drive. Thanks to each of you who contributed.

Blood Drive a Success

A special thank you goes out to the many Convair, DSD-Western Center, and Space Systems employees who became "Beary Special" people when they participated in the San Diego Blood Bank blood drive on March 23-27. The 861 pints of blood which were collected during the drive will be used by the San Diego County hospitals

to help meet the community's growing blood need.

Convair, Space Systems, and DSD have a blood reserve fund in cooperation with the San Diego Blood Bank for you and your eligible dependents. Should the need for blood arise, contact Employee Benefits.

Blood drives are conducted twice a year, but employees are eligible for the reserve fund even if they haven't donated.

Focus on Your Future Payroll Savings Really Work

Now you have the convenience of automatic payroll deductions toward your U.S. savings bond purchases — and you can control the amount. For as little as \$.50 a week, you can be a part of this sure-fire investment program.

High Market Interest Rates

Bonds now pay variable rates — just like the rates paid by money market accounts. There's no limit to the interest savings bonds can earn. For example, since the variable rate went into effect in 1982, interest rates on bonds have averaged more than 8.99%. But to earn the variable rate, you must hold your bonds for at least five years.

Guaranteed Minimum Return

In addition to high variable rates, savings bonds offer the protection of a guaranteed return on your investment. That means you can earn much more than the guaranteed minimum of 6%, but never less. That way, if rates in the financial market drop, your bonds are protected. By holding your bonds for five years, you automatically get the guaranteed return.

Important Income Tax Savings

Interest earned on bonds is exempt from state and local income taxes. In addition, federal tax on interest earned can be deferred until you cash in your bonds. Bonds also provide tax advantages if you hold them until retirement (most people are in a lower tax bracket after retirement).

Complete Safety

Guaranteed by the U.S. Treasury Department, savings bonds are a safe investment. They are registered securities that are easily replaced if lost, stolen, or destroyed.

A Liquid Investment

Unlike many investments that require you to commit your funds for longer periods of time, bonds can be cashed in any time after six months for half of their face value. After five years, your bonds pay full face value plus interest.

Buy U.S. Savings Bonds

Employment

For the week ending March 27, Convair Division employment was 9,008; Space Systems Division employment was 2,747.

Do you have a new phone number or mail zone? Report any changes to Telecommunications, 73413, to help update their files.

U.S. Savings Bonds Winners Each Day

- Padres tickets
- Dinners for two
- CRA memberships
- Disneyland tickets
- Gift certificates
- Membership in the San Diego Zoological Society
- And much more!

During the combined Convair, DSD-WC and Space Systems U.S. Savings Bond Drive April 6-17, all current bond purchasers are automatically eligible for the prize drawings, which will be held each day during the campaign.

New participants: As soon as you sign up, your card will be entered in the daily prize drawing. Sign up early for more chances to win.

Air Force Reservists Needed

Interested in a good part time job? The Air Force Reserve is looking for engineers with prior military experience for Individual Mobilization Augmentees (IMA) officer positions. There are many other vacancies in a variety of career fields for officers and enlisted personnel. The Air Force Reserve offers rewarding and challenging jobs and includes BX, commissary, and retirement benefits. For more information, call Joe Michel, 38027.

Cost Control Presentation Held

Methods of maximizing profits through effective cost control will be presented by Dave Draper, Science Applications International Corporation, at the April meeting of the Project Management Institute held Wednesday, April 8 at the Stardust Hotel Tower Room.

Social hour will begin at 5:30 p.m. and dinner at 6:30 p.m.

Ticket price is \$15.00 for members with reservations and \$17.00 for guests and members without reservations. Call 696-4390 for more information.

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Managing Editor: Cal Samuels

Production Editor: Bruce Macdonald

Assistant Editor: Theresa Scherer

Design/Layout: Bill Ferebee

Compositor: David Gard

CONVAIR

WEEKLY LOG

April 13, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Focus on Your Future

Bonds — A Smart Buy

Smart savers and savvy investors realize that today's savings bonds are one of the best savings plans offered to all Americans.

They know that bonds now offer a unique combination of features that really pay off: market-based interest rates with a guaranteed minimum, complete safety, and valuable income tax advantages. And, the convenience of the Payroll Savings Plan allows them to automatically build a cash reserve that may start out small but can grow and grow.

No Ceiling — Guaranteed Floor

There's no limit to what you can earn. No matter how high market rates may average, your bonds will keep up. And all this for as little as \$25, the price of a \$50 EE bond.

Bonds held five years or more not only earn market-based interest but also come with a guaranteed minimum rate of 6% per year, compounded semiannually. The guaranteed rate protects you in case market rates decline. Bonds fully mature in 12 years.

Savings Bond Campaign Prize Winners

Congratulations to these winners in the daily prize drawing. Each day, four names will be drawn from the pool of current and new bond purchasers. New participants: The sooner you sign up for the payroll savings plan, the more chances you will have in the daily drawings.

Monday, April 6

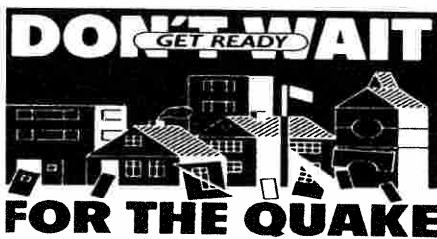
Sea World Passes
P.G. Holbert (Dept. 619-0)
Dinner at the Westgate
R.E. Kerzner (Dept. 137-0)
35mm Camera
M.A. Shann (Dept. 363-0)
13-in. Color TV
M. Esquivel (Dept. 043-0)

Tuesday, April 7

San Diego Zoo Passes
R.A. Alex (Dept. 131-2)
Compact Disc Player
D.H. Story (Dept. 767-0)
Starlight Theatre Series Tickets
D.F. Herman (Dept. 499-0)
Dinner at Mr. A's
R. Taubner (Dept. 657-0)

Wednesday, April 8

35mm Camera
C.L. Finch (Dept. 550-8)
Sony Watchman
M. Owens (Dept. 637-0)
Sea World Passes
M. Monji (Dept. 492-0)
Invader Cruise
D.G. Raaberg (Dept. 700-0)



Earthquake Awareness Month

April is Earthquake Awareness Month throughout the state of California. It is a time to remind us that, although we live in one of America's finest cities, we also live in a city of seismic instability.

Experts forecast an earthquake of catastrophic proportions within the next 30 years, and they say it could happen right here in San Diego County.

A major earthquake could cut off utilities and telephone lines, hospital and paramedic assistance, transportation, food supplies, and even aid from community agencies.

Education is essential to prevent unnecessary injury or death. The San Diego/Imperial Counties Chapter of the American Red Cross is offering a free one-and-one-

half-hour course on "Disaster Home Preparedness." The course is designed to help you and your family plan for and survive a major earthquake or other disaster, such as flood or fire. It includes information on ways to prevent unnecessary injuries, simple first aid, children's reactions to disaster, developing a family disaster plan, and preparing the home before disaster strikes.

For information on class schedules, contact the American Red Cross at 291-2620.

Meanwhile, the Red Cross offers these suggestions:

4 basics to do during an earthquake

- STAY CALM
- Inside: Stand in a doorway, or crouch under a desk or table, away from windows or glass dividers.
- Outside: Stand away from buildings, trees, telephone and electric lines.
- On the road: Drive away from underpasses/overpasses; stop in safe area; stay in vehicle.

6 basics to do after an earthquake

- Check for injuries — provide first aid.
- Check for safety — check for gas, water, sewage breaks; check for downed electric lines and shorts; turn off appropriate utilities; check for building damage and potential safety problems during after shocks such as cracks around chimney and foundation.
- Clean up dangerous spills.
- Wear shoes.
- Turn on radio and listen for instructions from public safety agencies.
- Don't use the telephone except for emergency use.

Exploratory Talks

Union and company representatives completed two full days of meetings last week that both parties described as constructive, straightforward, and candid. Representatives of the negotiating committee of the International Association of Machinists and Aerospace Workers (AFL-CIO), District 50, and Local Lodges 1125 and 2242, and representatives of General Dynamics Convair, Space Systems, and Data Systems-Western Center Divisions decided to continue exploratory talks in the weeks ahead in areas of mutual interest. Formal negotiations will begin on May 21. The current agreement expires July 15.



Reporting to duty were (from left) Marva Winters and Marion Campbell (Convair), Elaine Franklin (American Red Cross), and Dennis Bartlett (Space Systems).

A Night of Revelry

In Support of American Red Cross

On Saturday, March 21, several General Dynamics people relived the exciting forties. They met Uncle Sam, Eleanor Roosevelt, and Rosie the Riveter at the "B" Street Terminal to celebrate a Night of Red Cross Revelry. The bands played dance music from the repertoires of Glenn Miller, Tommy Dorsey, and Frank Sinatra. Dinner was served from food stations dubbed "A Chicken in Every Pot," "Uncle Samwiches," and the like. Guests, including the General Dynamics representatives, arrived dressed in 1940s civilian attire, military dress, and cocktail clothes.

The event was a fund-raiser to benefit the San Diego/Imperial Counties Chapter of the American Red Cross' local disaster relief and preparedness program.

The Red Cross is one of the many community programs Con-Trib Club supports each year. The contributions are converted to life-saving gifts of food, clothing, shelter, medicine, and other emergency relief for local disaster victims. In addition, funds are used to provide the resources necessary to teach the thousands of San Diegans how to be prepared before, during, and after a disaster.



Robert Sullivant (center) recently received his Apprenticeship Completion Certificate as a Milling Machine Machinist from Rodger Betts, general operations supervisor (left) and Jim Faulkner, project representative. Robert completed the 8,000 hours on-the-job training and received a Bachelor of Science degree in Manufacturing Engineering Technology.

Building a Landmark of Love

St. Vincent de Paul Center Volunteers Needed

In July, an entire city block of downtown property will become San Diego's largest public center offering shelter, food, and spiritual and physical care to the city's needy. The new St. Vincent de Paul Center will be available not only to the city's hundreds of down-and-out citizens, but also to families on a long- and short-term basis.

The center will offer centralization of emergency services — medical, housing, counseling, and food — in one location.

The California mission-style design of the facility, in a departure from the cold, institutional atmosphere of most similar institutions, is meant to evoke the early missions' traditional role of refuge and hospitality. The atmosphere, says Father Joe Carroll, president of the St. Vincent de Paul Center, is meant to state "that every person who enters has a self-worth that is unique and special because they were created by God."

The center, supported through your Con-Trib Club, is still in need of volunteers who can offer specific skills or general support and financial help. The facility needs everything from typists and counselors to drivers and cooks; teachers, writers, painters; carpenters, mailclerks, doctors and nurses. General Dynamics is forming an interdivisional team to work weekends or evenings between now and the Center's opening in July.

Whenever there's been a community need, San Diego's General Dynamics employees have responded. Let's pull together again and support a noble goal for our community. Departments can form teams, and clubs might use their resources to aid this project. Please complete the form below and mail it to the *Weekly Log*.

If you want to help financially, send your contributions to:

St. Vincent de Paul Center
1550 Martin Luther King, Jr. Way
San Diego, CA 92101

For more information, call Glen Richardson, 77083.

ST. VINCENT DE PAUL CENTER VOLUNTEER

NAME: _____

EXTENSION: _____ MZ: _____

SKILLS: _____

AVAILABILITY: (Weekends, evenings, etc.) _____

Mail to: *Weekly Log*, MZ 11-1330.

Bulletin Board

Notice. Space Systems employees who need to prepare an engineering specifications should contact Department 817-0, Launch Vehicle Systems Specifications group, for assistance. They have the division preparation guides for generic and program-peculiar specifications for both Department of Defense and commercial programs. Call Bob Blumling, 78071.

NEO Postponed at LF. Convair will not have a New Employee Orientation at Lindbergh Field on April 17. The next session will be held on May 15.

Tax Reminder. The Tax Reform Act of 1986 requires all persons age 5 or older to have a social security number if they are claimed as a dependent for income tax purposes. This social security number must be shown on all federal tax returns for the taxable year 1987 and later.

The best way to really train people is with an experienced mentor . . . and on the job.

Join the Team for March of Dimes

There is still plenty of time to join the Convair Team for WalkAmerica/TeamWalk. We'll be gathering at Fiesta Island on Sunday, April 26, for a fun walk around Mission Bay. This event is the March of Dimes' largest fund-raiser to help the fight against birth defects.

Television, radio, and sports celebrities will be on hand to promote this event that includes music, entertainment, prizes, free food, and much more.

Convair has challenged Hughes Aircraft for some friendly team competition on a per-capita basis. Last year Hughes won the challenge, but this year we'll be ready for them.

Show your community spirit and join the team in support of this very worthwhile cause. For more information, call 68704 or 39955.

Employment

For the week ending April 3, Convair Division employment was 9,019; Space Systems Division employment was 2,743.

CONVAIR

WEEKLY LOG

April 20, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Stanley Pace (right) talks with Space Systems Janice Conner, material records auditor, and her husband Cliff.

"We're in the Space Business to Stay"

Pace Visits Vandenberg

General Dynamics Chairman and Chief Executive Officer Stanley C. Pace visited Vandenberg Air Force Base on April 10 to tour the Space Systems facilities and launch complex and to address the Atlas team and their guests during a special dinner meeting at the Santa Maria Inn. Pace's visit marked the first time a General Dynamics chairman of the board has visited Vandenberg to meet with the Western Test Range people.

After extending accolades to the enthusiastic Vandenberg General Dynamics team, Pace gave an overview of our nation's space program. "These are challenging times," Pace said. "Space is an important part of our overall defense program. It is a challenge unmatched by our history. Such expanse does not come easily; it requires individual adaptations and response to changes."

Reviewing the progress that General Dynamics has made in the area of ethics and administrative excellence, Pace said that the company now is performing to meet customer compliance and public expectation. "We have had some major, favorable headlines on our ethics program," Pace said. "Our objective is to have the American public and the Department of Defense know that we are instrumentally and conscientiously serving our country. Our employees have already fallen into step with our administrative enhancement programs, and we must keep these programs working effectively."

Pace also discussed the future of the U.S. defense industry. "Despite the fact that the American manufacturing forces face stiff competition from foreign mar-

To: All Convair Employees

As you all know, last November the government awarded McDonnell Douglas Astro-nautics Company (MDAC) 61% of the fiscal year 1987 Tomahawk buy. The reason, simply stated, was price. Although our bid reflected progress in coming down our learning curve, MDAC significantly underbid our price and the final award to Convair was held up for several weeks pending additional evaluation. Within four months, we must again submit a bid for the fiscal year 1988 buy. If the same disparity between our prices exists this time around, MDAC could win the entire buy.

We are determined not to let this occur. To ensure that we are successful, we ask for the help and understanding of all employees as we work to effect significant reductions in the areas of support, overhead, material, and labor.

With your help, we can get the job done and return Convair to its position as primary supplier of the important Tomahawk weapons system.

Michael C. Keel
Acting General Manager
Convair Division

kets, the U.S. remains superior in its defense technology."

The chairman expressed strong concerns over the government's push to make the defense industry more competitive. "Our commitment to maintain technically superior defense systems should not be compromised through cutting research and development. The Department of Defense requirements for competition could undermine the incentives for defense contractors to continue to pursue both contracted and independent research and development. I hope that there are people with understanding and courage among our leaders to decide what we bid on competitively versus technologically."

Regarding the future of Space Systems Division, Pace said, "We have had some disappointments, but there are many opportunities for a prosperous future: commercial launch vehicles, Advanced Launch System, more Atlases. Just today we were selected with three other companies to pursue the Adaptable Space Propulsion System study for a new advanced upper stage. We have a good future for Space Systems, we have the team in place, and we can do it."

"The division's major thrust is to win the Advanced Launch System for SDI," Pace said. "The work that we've done over the past years puts us in the running for winning this. I want to assure you — we're in the space business to stay."

New Personnel Hotline

In addition to the Ethics Hotlines, all divisions within General Dynamics have established a Personnel Hotline to focus on personnel issues arising from Objective 5 of the *General Dynamics Standards of Business Ethics and Conduct*: "As employees, we will treat one another fairly and with the dignity and respect due all human beings."

The Personnel Hotline will be answered by your local personnel ombudsman, who will safeguard the privacy of all communications. In addition, there is a toll-free 800 number for the corporate personnel ombudsman located in St. Louis.

The Personnel Hotline opens another significant means of hearing and responding to employee relations matters. Of course, the Ethics Hotline will continue to be available to any employee wanting or needing to use it, regardless of the specific matter involved.

Each ombudsman will provide a 24-hour Personnel Hotline. Convair's Joanne Kowalik (39528) and Space Systems' Roberta Baade (78990) have been appointed personnel ombudspersons.

New General Dynamics hotline posters giving the telephone numbers for the General Dynamics Ethics Hotline, Personnel Hotline, and DoD Hotline are currently being posted throughout all Convair and Space Systems facilities.



Doris Raaberg, executive secretary to Space Systems General Manager Alan Lovelace, was one of the lucky winners during the daily Savings Bond prize drawings (dinner cruise for two on the Invader). Celebrating with Doris are the staff secretaries for Space Systems. From left, Luanne Cranston, Raaberg, Marilyn Bosworth, Maridee Petersen, Anne Downey, and Beth Stawiarski.

More Prize Winners

The following employees were winners in the 1987 U.S. Savings Bond Campaign daily drawings.

Thursday, April 9

San Diego Zoo Passes
H. Gurol (Dept. 873-0)
Amtrak/Disneyland Trip
Jim Hale (Dept. 361-0)
Dinner at the Boathouse
D.G. Schukar (Dept. 799-0)
CRA Health Fitness Membership
D.D. Butler (Dept. 525-2)

Friday, April 10

Sea World Passes
C.G. Knight, Jr. (Dept. 244-0)
35mm Camera
W.T. Olson (Dept. 606-0)
Starlight Theater Tickets
C.F. Russell (Dept. 461-0)
Invader Cruise
J.R. Charity (Dept. 264-0)

Monday, April 13

San Diego Zoo Passes
B.D. Spillman (Dept. 961-0)
Compact Disc Player
N.H. Craig (Dept. 850-0)
Amtrak/Disneyland Trip
T.H. Bizoche (Dept. 457-0)
Dinner at Tom Ham's Lighthouse
M. Ogman (Dept. 855-1)



Pete House (002) hands Holly Grassi a winning card.



Operations Recognizes Employees of the Month

Ken Lake, division vice president - Operations, and his staff recently honored the 1987 first quarter Employees of the Month at a breakfast held in recognition of their individual contributions to the department and Convair.

Lake began his recognition program by presenting Dick Martin, supervisor - Department 030, with an Extraordinary Achievement Award for his efforts which resulted in an excellent rating for Advanced Programs during a recent program security inspection.

Communications was the theme that Lake stressed in his address. Lake said that communications must be opened up throughout the company. The Employees of the Month breakfast was an example of Convair's commitment to provide a channel of communications for the company's people.

"Teamwork is essential to our continued successes," Lake said. "The key to this teamwork is communications, and we want the work environment to be conducive to the flow of information and concerns. I encourage each of you to become a part of the survey plan to improve Convair communications across the board."

Congratulations to these Operations Employees of the Month.

Manufacturing Engineering

David Hallas
Diane Kyreages
David Skay
Jon Thuerbach

Manufacturing/Material Control & Scheduling

Hank Cormier
Troy Devin
Bob Zinser

CM Manufacturing Product Line

Kathy Adams
Estelita Dayacap
Mitch Weingel
Bud Lakin

Procurement

Terry Green
Karl Castor
Debbie Deno
Jack Waldemar

Aircraft Programs

Dean Richetti
Aryse Keptner
Leroy Booker
Al Harris

Operations Administration

Shirley Trepander
Marilyn Melton
Donna Handy
Mary Court
Sue Addy

Advanced Programs

Michael Rhamy
Norm Taylor

Fabrication & Production Engineering

Kirk Hunley
Jose Orozco
Joe Picazo
Ranier Goerres

Plant Services

Chuck Johnson
Jim Brown
Tanya Vanboxtel



Ken Lake (left) presents Dick Martin with an Extraordinary Achievement Award for excellence in program security.

Do you have a new phone number or mail zone? Report any changes to Telecommunications, 73413, to help update their files.



Con-Trib chairman Steve Woolley (right), accepted the award from former Congressman Clair Burgener on behalf of General Dynamics employees.

A Tribute to Those Who Care

General Dynamics Employees Recognized

The employees' Con-Trib Club was honored for its contributions to the Burn Institute of San Diego at its 14th Annual Spirit of Courage Awards Banquet held April 9. In presenting the award, former Congressmen Clair Burgener said, "The employees' Con-Trib Club of General Dynamics serves as a model for other employee groups in the county. These employees recognize that many agencies depend upon employee dollars to deliver health and social service programs to the community. I am proud to pay tribute to the employees' Con-Trib Club of General Dynamics."

Since 1973, the Con-Trib Club has played an instrumental role in helping the institute reach its goals. The club has given over \$19,000 to the cause; these dollars represent only a portion of the total funds distributed by the club to local organizations.

The Burn Institute is a nonprofit organization founded in 1972 to address San Diego's burn problem's. Its original goal was to fund a regional burn center to provide specialized treatment for severe burn victims. Thanks to your donations, the center is now in operation.

Today, the institute's main emphasis is on reducing the number of burn injuries and deaths in San Diego by providing community education programs, financial support of burn research projects, and funding for specialized medical equipment.

Thanks to every employee who supports the Con-Trib Club. This is your award.

Rosey Grier to Speak

Sports fans, television and movie buffs, and historians: Mark April 21 on your calendars. That's the date Rosey Grier will speak at the National Management Association Convair Chapter Sports Night dinner meeting at the Marriott Hotel, La Jolla.

Social hour will begin at 5:00 p.m. and dinner will be served at 6:30 p.m. The price is \$9.95 for members and \$17 for nonmembers.

Call 75240 for table reservations.



Attending the Industrial Modernization Incentive Program workshop were (from left) Lance Martin, Hercules Aerospace Co.; Dan DeJulius, Hughes Aircraft Co.; Bill Rose, General Dynamics Convair Division; Richard Havens, General Dynamics Fort Worth Division; George Burgess, McDonnell Douglas; Wayne Rauschenberger, Northrop Corporation; and Tom Crowell, Lockheed-Georgia Co.

IMIP Conference Held

Convair hosted an industry-wide Industrial Modernization Incentive Program (IMIP) workshop at the Kearny Mesa facility on April 14, 15, and 16 to develop a discounted cash flow model and documentation for use by all contractors engaged in IMIP programs.

IMIP is a Department of Defense program that provides incentives to industry to reduce cost through modernization of facilities.

Bill Rose, Convair Tech Mod Business Office, and Richard Havens, Fort Worth Deputy Manager of IMIP, hosted the three-day workshop with financial representatives from Hughes Aircraft Co., McDonnell Douglas, Lockheed-Georgia, Northrop Corp., LTV, Hercules Aerospace Co., and General Electric Corp.

Commercial Marketing of Atlas/Centaur OK'd

Space Systems Division has received approval from the National Aeronautics and Space Administration (NASA) to market Atlas/Centaur rockets commercially.

It has also received permission to use NASA-controlled facilities for building the Atlas/Centaur.

The agreement makes General Dynamics the first rocket company in the United States to win authorization to take over production of a government rocket system and to use a NASA launch pad on a reimbursable basis.

Proposals are already in work for European telecommunication satellites and U.S. Navy fleet communications satellites.

People have ego and development needs . . . and they'll commit themselves only to the extent that they can see ways of satisfying these needs.

A Forgotten Skill?

The Art of Listening

People would greet more people by name, botch fewer job assignments, and mumble fewer "pardon me's" and "what's" if only they would listen.

Listening is perhaps the most important, but most often neglected, of the basic communication skills. It is particularly important for the successful operation of a company the size of General Dynamics.

Statistics show that 75% of what we hear, we hear incorrectly and, within a couple of weeks, we forget another three-quarters of the 25% heard accurately. Needless to say, we need to improve our listening skills.

How can we become better listeners? Here are some helpful hints.

1. Effective communication is unlikely if the listener feels that he is superior to others or has nothing to gain from listening. We must remember that every employee — subordinate or superior — is a valuable source of information. The successful listener cultivates these relationships.
2. Experts tell us many people hear what they expect to hear, regardless of what is actually said.
3. People tend to avoid listening to the difficult or boring. A large amount of potentially valuable information is missed in this way.



Members of the Research & Engineering March Team of the Month are (from left): Don Scheuer (679-0), Phil Bayro (624-3), Pete Lekas (623-1), Bob Bagierek (679-0), and Frank Des Georges (644-0)

Critical Milestone Met

Thanks, R&E Team

Congratulations to Research & Engineering's March Team of the Month. The team was responsible for the delivery of fully tested AFT Avionics Units. The task included development, proofing and implementation of production, automatic testing, and the manually overlaid special test. The team members' personal dedication and commitment helped overcome the schedule constraints and difficulty of the task involving up to 100 hours a week on the job. Their level of professionalism and achievement until the task was complete has earned them this recognition.

Building a Landmark of Love

St. Vincent de Paul Center Needs Volunteers

Since 1982, the St. Vincent de Paul Center has provided 1,200 meals and 200 beds daily to the homeless of San Diego. Thousands of people have received counseling on budgeting, parenting, and employment. Children receive an education and needy families receive food, clothing, and furniture. Under Father Joe Carroll's direction, the center also cares for needy senior citizens, holds special programs for the homeless during the holidays, and sends one million pounds of food to Mexico each month. In the time the center has been operating, Convair's Con-Trib Club has donated \$18,850 to the operational fund of the center.

On July 22, the new St. Vincent de Paul Emergency Facility will open at 1501 Imperial Avenue. There will be housing for 350 people, a dining room to provide 2,000 meals a day to residents of the shelter and street people, a medical clinic, shower and laundry facilities, counseling offices, a food distribution center for poor families, a day room for transients, and an interdenominational chapel for prayer and meditation. The price tag? \$10,000,000! Thanks to the generous response of 20,000 donors who contributed money to the project, \$8,000,000 has already been raised.

The center does need financial aid, but it also needs volunteers to assist in the success of the operation. General Dynamics is forming an interdivisional team to help the center meet its opening goals. Volunteers are needed in the following areas: emergency assistance; employment preparation; social and educational services; medical services; general support services; construction/mechanical skills; and general helpers.

If you would like to join the team as a volunteer between now and July, send your name, mail zone, extension, and desired service areas to the *Weekly Log*, MZ 11-1330. For more information call Glen Richardson, 77083.

Contests and Workshops that Challenge

MESA Days Held

Constructing an oil derrick from toothpicks, building a container to keep eggs from breaking after a six-story fall, competing in a math olympics — these are the activities that challenged the 800 students who attended Southern California MESA Days on March 27 and 28. MESA (Math, Engineering, Science Achievement) program is designed to encourage under-represented ethnic groups to acquire the academic skills necessary to study math,

engineering, and the physical sciences at the university level.

Convair and Space Systems has supported the project for the past seven years. Frank Rojas, Convair logistic specialist, has been a major contributor to the success of San Diego's MESA and is currently serving as chairman of its advisory board. Ken Biccum, Convair Human Resource administrator, is a board member also.

Besides participating in MESA Days, the board solicits funds for college scholarships, organizes educational presentations at high schools, and assists in the placement of students in summer jobs.

Frank and Ken deserve a pat on the back for their community support of a program that promises long range benefits for industry.

Excellence in Training

The first class to complete Contracts & Estimating Certificate Cost Analysis (CCA) program was recognized at a formal ceremony held at Kearny Mesa.

CCA is a voluntary program for employees who wish to improve their contracts and estimating knowledge and skills. Participants earn a certification, awarded jointly by the company and the University of San Diego, after successfully completing 100 hours of classroom training. The program is part of the department's new training program which was designed to provide college graduates and other new hires with information necessary to make a quick transition into the Contracts & Estimating environment.

It began several years ago when management decided to completely revamp their old training program. Three policy objectives — the indoctrination of new personnel, the expansion of employee job skills, and the facilitation of career development were adopted.

Following these objectives, Robert Johnston, manager – Program Estimating, developed a program which incorporated the specific needs of the customer, corporation, division, department, and individual. His program has since expanded to include over seventy department-sponsored and outside-purchased courses — the highlight being the CCA program. The employees who participated in the program deserve special recognition for pursuing educational excellence.

When people are in an atmosphere of trust, they'll put themselves at risk; only through risk is there growth . . . reward . . . self-confidence . . . leadership.

Free Trips to Hong Kong and Korea

Offset Vacation Travel Show

Here's your chance to win a free trip for two to the Orient. The General Dynamics Offset Vacation Program will present its first combined San Diego divisions Travel Show on April 29, in the Convair cafeteria.

As part of our Corporate-wide commitment to promote tourism and goodwill to countries purchasing General Dynamics products, the travel show will highlight the special discounted tours to the Orient and Turkey. All General Dynamics employees, retirees, families, suppliers, and friends are invited.

Entertainment and refreshments will be provided, along with an opportunity to learn more about these exciting vacations and a possibility of winning various prizes, including the grand-prize trip to Hong Kong and Seoul. The show will begin at 5:00 p.m., and you must be present to be considered for the prize drawings.

Watch for a promotional flyer and lobby displays detailing the show. For more information, call Norma Hensiek in Travel Services at 547-8327.

Get Ready to Walk, America

This Sunday, April 26, Convair and Space Systems employees will be participating in the March of Dimes WalkAmerica/TeamWalk to help raise funds for the prevention of birth defects.

Registration for the event is anytime between 7:00 and 10:00 a.m., with the official kickoff time at 8:00 a.m. Come early and join the team at the kickoff. We'll have an RV (look for the General Dynamics sign) parked at the starting area. This is where T-shirts will be issued and pictures taken.

Make sure to bring only the white copies of your sponsor sheets to the starting point at Fiesta Island. For more information, call 68704 or 39955.

Employment

For the week ending April 10, Convair Division employment was 9,028; Space Systems Division employment was 2,751.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330.

Managing Editor: *Cal Samuels*
Production Editor: *Bruce Macdonald*
Assistant Editor: *Theresa Scherer*
Design/Layout: *Bill Ferebee*
Compositor: *Dianna Rich*

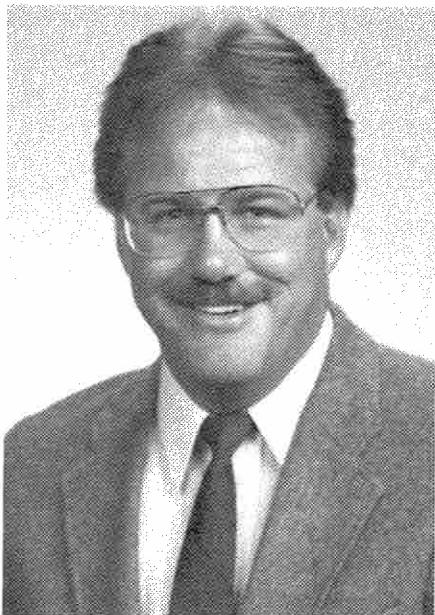
CONVAIR

WEEKLY LOG

April 27, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Corporate Office Announces Buyer of the Year

When Corporate Office announced its Buyer of the Year March 11, a local employee found his name in the limelight.

Convair's Greg Chapin, a senior buyer in the Fabrication Machine Shop, was selected for the award based on his outstanding accomplishments in the Small Disadvantage Business program. Accompanying the award was a Certificate of Achievement and a \$1,500 gift certificate.

Greg was selected from a field of candidates, each of whom had been nominated by their respective division. His task is to increase Convair's purchases from minority enterprises by helping these vendors with production, manufacturing, and quality assurance. Congratulations Greg, for a job well done.

Corporate Night Features Oliver Boileau

Oliver Boileau, President of General Dynamics Corporation, will speak May 12 at the National Management Association Convair Chapter dinner meeting held at the Hotel InterContinental.

Social hour will begin at 5:00 p.m. and dinner will be served at 6:30 p.m. Tickets are available from NMACC boosters. Prices are \$9.95 for members and \$17 for nonmembers. Call Linda Loffredo, 38353, for table reservations.

To: All Space Systems Employees

We have set a goal to reduce the price of our Atlas/Centaur by 25 percent to bring our price in line with our competitors in the commercial launch vehicle business. This is a big challenge, but I am certain that if we all work together we can find ways to bring our costs down.

The commercialization of Atlas/Centaur is the key element in our plan to build up our near-term business base. We need this base of launch vehicle production while we compete for the next generation of space transportation systems, which represent our long-term future.

We are vigorously marketing Atlas/Centaur to commercial customers around the world at this time. We have a good program to offer them, with features that extend well beyond the proven reliability and quality of our launch vehicle. The recent agreement we signed with NASA enables us to offer prospective customers full launch services. In addition, we have kept our Atlas/Centaur production line open, even though the last Atlas/Centaur under current contract was delivered to NASA in February. This enables us to offer customers a launch schedule that is responsive to their requirements, as we can launch commercial payloads as early as mid-1989.

We all should be aware, however, that the commercial launch vehicle business is highly competitive. Our potential customers have told us that price is going to be a very important determinative in deciding who gets the future business. Without question, losing the Medium Launch Vehicle competition was a serious setback for us. But one good thing resulted from this competition: We identified a number of ways to reduce Atlas/Centaur production and launch costs. We intend to examine these areas in detail over the weeks ahead and look for other ways to reduce costs. I'm sure that our team will again rise to the challenge, and that we will maintain our leadership role in space launch vehicle and transportation systems.

A handwritten signature of Alan Lovelace.

Alan Lovelace
Vice President & General Manager
Space Systems Division



Klaus Flitner (left) and Bill Wise.

Safety Behind the Wheel

Convair and Space Systems won the 100,000 to 200,000 miles-per-quarter category of the Motor Fleet Safety Contest. Klaus Flitner, manager - Transportation accepted the award April 23 from Bill Wise, director - Plant Services.

Conducted by the San Diego County Safety Council, the contest compared the accidents-per-miles-driven ratios of participating private industries. Awards were presented to the companies that had the lowest rate in each category.

Klaus and his motor fleet team are commended for their efforts and their commitment to perform in an accident-free manner.

A travel show, which highlights special discount tours to the Orient and Turkey, will be held April 29, at 5:00 p.m. in the Convair cafeteria. For more information call Norma Hensiek, 547-8327.





Retirees Joe Miller (left), Frank Wade, and Ken Lemley discuss PBY-5A restoration tasks.

Retirees in Action

Restoration Begins on PBY-5A

General Dynamics retirees have started restoring a PBY-5A for the San Diego Aero-Space Museum. Fuel tanks have been emptied and purged and work stands acquired. The outer panels are currently the focus of the retirees' attention. The aircraft is to be moved into the hangar at the Harbor Drive facility for the majority of the work.

Once complete, the restored PBY-5A is to rest on short pedestals in the rotunda of the Aero-Space Museum. Platforms will allow viewers to look inside, so much of the restoration will include the structural mounting and first-class refurbishment of the interior.

Remember the Dragonfly? A second group of General Dynamics retirees is continuing to restore their project — the L-13 Dragonfly. They anticipate completion in early summer.

Bulletin Board

Attention, NMACC Members. Because the Convair National Management Association's *Constitution Revisions* were mailed late, comments from members will be accepted until May 11. The vote to ratify the constitution will be held at the June dinner meeting.

HFC News. Rock A'robics begins April 27 at 4:30 p.m. in the Health-Fitness Center. The five-week session, which meets Monday through Thursday, costs \$20 for members and \$25 for nonmembers.

Space Systems NMA Recognition. The National Management Association would like to recognize individual employees for their dedication and service to their Chapter. If you know a fellow worker who deserves special recognition for service to their chapter, the community, or the company, we'd like to know. Mail that person's name, reason for nomination, mail zone, and extension along with your name and extension to Carol Aguilar, MZ 21-7660.

Food, Fun, and Friends

We share so much with our coworkers — frustrations and deadlines, successes and milestones — yet we seldom have the opportunity to share our lives outside the work environment.

Members of the ACM Finance department wanted to change that. So on Saturday, April 4, they gathered with their families at Missile Park for a friendly game of softball and a barbecue.

Participants arrived in T-shirts, sweatpants, and shorts — a contrast to work day attire. They carried softball gloves, not briefcases, and talk of home runs, RBIs, and pitchers overshadowed thoughts of missiles, budgets, and audits.

It was a time to discover the lighter side of fellow workers. By promoting cooperation and teamwork outside the workplace, the department hopes to strengthen relationships on the job.



The National Management Association Convair Chapter presented Erin Faralan, March of Dimes Ambassador, a plaque in appreciation for outstanding contributions to the March of Dimes and for being a "One in a Million Ambassador." Kayanne Edmonds and former NFL star Rosey Grier presented Erin the award at the NMACC dinner meeting held April 21, at the Marriott Hotel.

Ethics Dilemma

What are the company policies governing breaks for salaried employees?

Salaried employees, by the very nature of such classification, are allowed to take breaks whenever their work assignment permits. The length and frequency of breaks, as well as the conduct during these breaks, are up to the individual employee.

The employee is expected to act in a professional manner. As with any privilege, abuse, disruptive conduct, or any nonprofessional conduct will result in limitations of the privilege. It is also up to individual employees to accurately record their work day on their TDCs. Keeping the preceding discussion in mind, breaks should not result in an ethical dilemma. If the breaks are disrupting your work, report the situation to your supervisor.

Savings Bond Campaign Prize Winners

Congratulations to these winners of the daily bond prize drawings. Three winners in the grand prize drawings will be selected April 27. The prizes: a trip for two to Zurich, Switzerland; one to London, England; and one to Acapulco, Mexico. All bond purchasers are automatically eligible for the drawing. Employees still have time to sign up for the Payroll Savings Plan. Join today.

Tuesday, April 14

Sea World passes

B. Cottingham (894-0)

13-in. color TV

E.H. Tomlinson (543-5)

35mm camera

C.R. Danner (100-7)

Dinner at the Bahia Resort

W.F. Bourbonnais (241-0)

Wednesday, April 15

San Diego Zoo passes

A.L. Dyer (131-0)

Sony Watchman

S.L. Esslinger (783-0)

35mm camera

J.D. Castaneda (002-0)

Dinner at Avanti of La Jolla

E.M. McLaughlin (524-3)

Thursday, April 16

Sea World passes

A. Mylonakis (678-0)

Amtrak/Disneyland trip

M.A. Flider (264-0)

San Diego Zoo passes

B.H. Kuetzing (131-0)

Dinner at Top O' the Cove

G.A. Nguyen (198-0)

Friday, April 17

San Diego Zoo passes

E.S. Willois (714-1)

Amtrak/Disneyland trip

J.A. Potts (253-5)

CRA Health-Fitness Center membership

F.M. Castro (272-0)

Dinner at Reuben E. Lee

G.S. O'Connor, Jr. (518-0)

Employment

For the week ending April 17, Convair Division employment was 9,025; Space Systems Division employment was 2,757.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330.

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Compositor: Dianna Rich

CONVAIR

WEEKLY LOG

May 4, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Excerpts from *Bidding Battle Puts an Ax to Tomahawk Missile's Price*

"When General Dynamics Corp. started building the Tomahawk cruise missiles in 1980, the giant defense maker had every reason to assume it had locked in more than \$10 billion in revenue that would flow in steady increments for the next 15 years.

Under the old rules of Pentagon weapons buying, General Dynamics was right. But a few years ago, the Navy changed the rules — and General Dynamics, like many other defense companies these days, is still smarting from the consequences.

What the Navy did was something it and the other military services have been doing increasingly during the past few years — it decided to throw open each year's competitive bidding. To make that possible, General Dynamics was forced . . . to share its cruise missile technology with rival McDonnell Douglas Corp.

McDonnell then began looking for ways to cut costs, pared down its overhead and started production at an assembly plant in a low wage area in Titusville, Fla.

A few months ago, after three years of trying, the firm's efforts finally paid off with a bare bones bid that beat out General Dynamics. The Navy has now switched the bulk of this year's buy of 400 Tomahawks to McDonnell Douglas, leaving General Dynamics out in the cold — and determined that it won't happen again.

"You bet it was a blow," said Fred Bettinger, General Dynamics (staff) vice president for business communications. "It was a painful experience to lose and we don't want it to happen twice."

As the Navy sees it, the Tomahawk cruise missile fight shows the benefits of injecting a semblance of market discipline into the defense procurement process. Only three years ago, when General Dynamics was still the sole source provider, Tomahawk cruise missiles were rolling off the company's assembly lines in San Diego at about \$2 million a copy.

This year, the missiles are being produced at McDonnell Douglas' plant in Titusville at \$1.5 million apiece, making the Tomahawk that rare bird, a weapons system that actually drops in price . . .

According to one senior Navy official who oversaw the competition, General Dynamics was caught off-guard by this year's bid, never suspecting that McDon-

To: All Convair Employees

The Washington Post recently published an article about the Defense Department's continuing emphasis on finding ways to increase competitiveness for weapon systems now in production. The article focused primarily on the second-sourcing approach in which two or more companies compete for production orders, with the majority or all of the production buy going to the contractor with the lowest bid.

The Post reporter, Mike Isikoff, used the Tomahawk program to illustrate this point. The headline read: "Bidding Battle Puts an Ax to Tomahawk Missile's Price." We are printing the following excerpts because they underscore the importance of finding new ways to increase our competitiveness on Tomahawk as we enter the next round of competition with McDonnell Douglas.

In reading these excerpts, bear in mind that we do not necessarily agree with all of the information in the article. We do not know where the reporter got the impression that "General Dynamics . . . had every reason to assume it had locked in more than \$10 billion in revenue." We believe the correct total sales potential of the Tomahawk program to the missile builders is closer to \$400 million per year for approximately 10 years, which adds to a total of \$4 billion over an extended period. Later, the story references Tomahawk unit prices of \$2 million three years ago and \$1.5 million this year. These figures certainly do not represent our price and we have no way to judge their accuracy without knowing what is included in the way of missile hardware, guidance systems, engines, boosters, support equipment, testing, spares, logistic support and other areas. Most of these items are supplied by many other contractors.

Still, this article does drive home the importance of our addressing all aspects of Tomahawk production, support, material, overhead, and labor as we strive to become more competitive with McDonnell Douglas and get back to our position as the primary supplier of the Tomahawk weapon system.

Michael C. Keel
Acting General Manager
Convair Division

nell Douglas would go as low as it did. "GD just misjudged McDonnell's strategy," said the official.

But GD's Bettinger says the company has every intention of coming back and winning next year's bid. "This has forced us to reevaluate the whole program," he said.

Space Systems Organization Changes

A number of organizational changes were announced recently at Space Systems Division. According to Alan Lovelace, vice president and general manager, "The changes are being made to help the Division manage its current contracts, obtain new business, and further its efforts to become more competitive." The changes include the following realignment of its Program Development Organization:

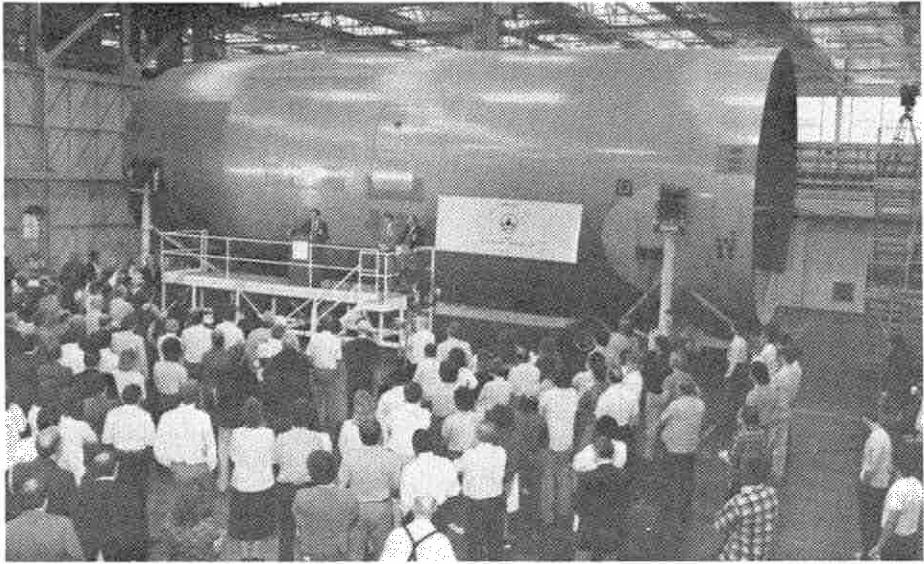
- Energy programs, Defense Systems programs, SDI/ADI, Advanced Space programs, and all IRAD, CRAD, and B&P

management will now report to the Engineering Department.

- The Atlas/Centaur extensions and work on commercial Atlas/Centaur will report to the Atlas/Centaur Program Office. A dedicated marketing team is assigned to this program to support efforts to win new business.
- A marketing organization led by its new Director, J. Jeffrey Irons, will report to the Vice President and General Manager.
- In addition, the Division Competition Advocate function is being assigned to the Director of Productivity.

Happy Cinco de Mayo





The KC-10 team gathered for the final fuselage delivery ceremony.

Last KC-10 Rollout

The last KC-10 fuselage to be manufactured by Convair as a subcontractor to McDonnell Douglas was the subject of a special rollout ceremony held at Lindbergh Field on April 28. Ken Lake, division vice president — Operations; Roy Gilmour, program director — Aircraft Programs; and Lou Imbimbo, director — Aircraft Programs Manufacturing Product Line, attended the event.

During his address, Imbimbo told the KC-10 team, "I'd like to thank all of you for making the KC-10 fuselage program a success. You have done an outstanding job in meeting all of the scheduled deliveries

with a very high-quality product. Our customer, McDonnell Douglas, is very pleased and has expressed their appreciation on several occasions."

The first KC-10 fuselage, ship 311, was delivered in August 1979, following 310 previously manufactured DC-10 fuselages. The ceremony celebrated the delivery of the 60th and final KC-10 fuselage, ship 438. KC-10 work has been replaced with DC-10 fuselage production, nine of which are being built prior to production of the newly launched MD-11 fuselage program. Production of the MD-11 fuselage should continue at least into the mid-1990s.

The company does not consider the area a health hazard. However, any concerned Plant 19 employees should feel free to contact Dr. E. F. Coil at Central Medical, 28591.

The Drive is Over

The Results Are In

The final results of the combined Convair, Space Systems, and Data Systems Division-Western Center U.S. Savings Bond Drive are in. The goal was 95% overall participation: Data Systems came in at 98%, Space Systems at 97.9%, and Convair at 93%. Thanks to all departmental coordinators, new savers, and continuing participants for making this year's bond drive a success. Congratulations to those who are making an investment in their future!

Bond Drive Grand Prize Winners

J.S. Toor (685-0)

Trip for two to Zurich, Switzerland

E.J. Brunner (892-0)

Trip for two to London, England

J.A. Kolodziej (001-0)

Trip for two to Acapulco, Mexico

Bulletin Board

New East County Bus Pool Formed.

Immediate openings are available for riders in a bus pool from El Cajon to Lindbergh Field and Plant 19 for the 7:00 a.m. to 3:30 p.m. shift. The cost is a minimum of \$10 a week, and may vary depending on the number of riders. For more information call Ray Gleffe at work, 260-2300, or at home, 789-4295.

Saint Vincent De Paul Center. A special thank you is extended to all the employees who showed their support by volunteering to give their time to help meet the needs of the Center and to those who contributed financially. Volunteers will be contacted within the next few days and given additional information. Employees who would still like to assist should call Glen Richardson, 77083.

Pinecrest Park. Pinecrest Park's rental trailers are now available. For only \$12 per trailer per night (minimum of two nights, maximum of seven), your family and guests can camp in one of the CRA's nine trailers. Employees wanting to use the camp site should call the CRA, 39933, or Pinecrest, 765-0464, for reservations. Because of limited availability, you should reserve early. Watch for a complete overview of Pinecrest's facilities in an upcoming *Weekly Log*.

KM Cafeteria Notice.

The Kearny Mesa cafeteria will be closed Wednesday, May 6. Box lunches will be on sale for \$3.25 on the east patio of the cafeteria, just in front of the Employee Benefits office. The lunches will include your choice of a ham, turkey, or roast beef sandwich. Beverages are extra. Lunch services will resume on Thursday, May 7. Your cooperation is appreciated.

Employment

For the week ending April 24, Convair Division employment was 9,014; Space Systems Division employment was 2,758.

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Corporate Night Features General Dynamics President

Oliver Boileau, President of General Dynamics Corporation, will speak May 12 at the National Management Association Convair Chapter dinner meeting held at the Hotel Inter-Continental.

Social hour will begin at 5:00 p.m. and dinner will be served at 6:30 p.m. Tickets, available from NMACC boosters, are \$9.95 for members and \$17 for nonmembers. Call Linda Loffredo, 38353, for table reservations.

Plant 19 Safety Update

Recently a series of newspaper articles have appeared concerning PCB material at Plant 19. You should know that the Navy, CAL/OSHA, and Convair have taken air samples at Plant 19. None of these samples revealed any detectable level of airborne PCB. The transformers which contained the PCB material and the PCB material itself have been removed from the plant.

Published by General Dynamics Convair & Space Systems Divisions

Tomahawk Price and Quality — Key Issues in FY88 Competitive Bid

Last week's issue of the *Weekly Log* included excerpts from an article that ran in the *Washington Post*. It provided a good example of how the competitiveness of the defense industry is being explained to the outside world.

The example used in the *Post* article was the Tomahawk missile. In the fiscal year 1987 missile buy, we lost 60% of the missiles to McDonnell Douglas. With the fiscal year 1988 proposal due early in the third quarter, the *Weekly Log* editor asked Acting General Manager Mike Keel what Convair believes the government's key objectives are.

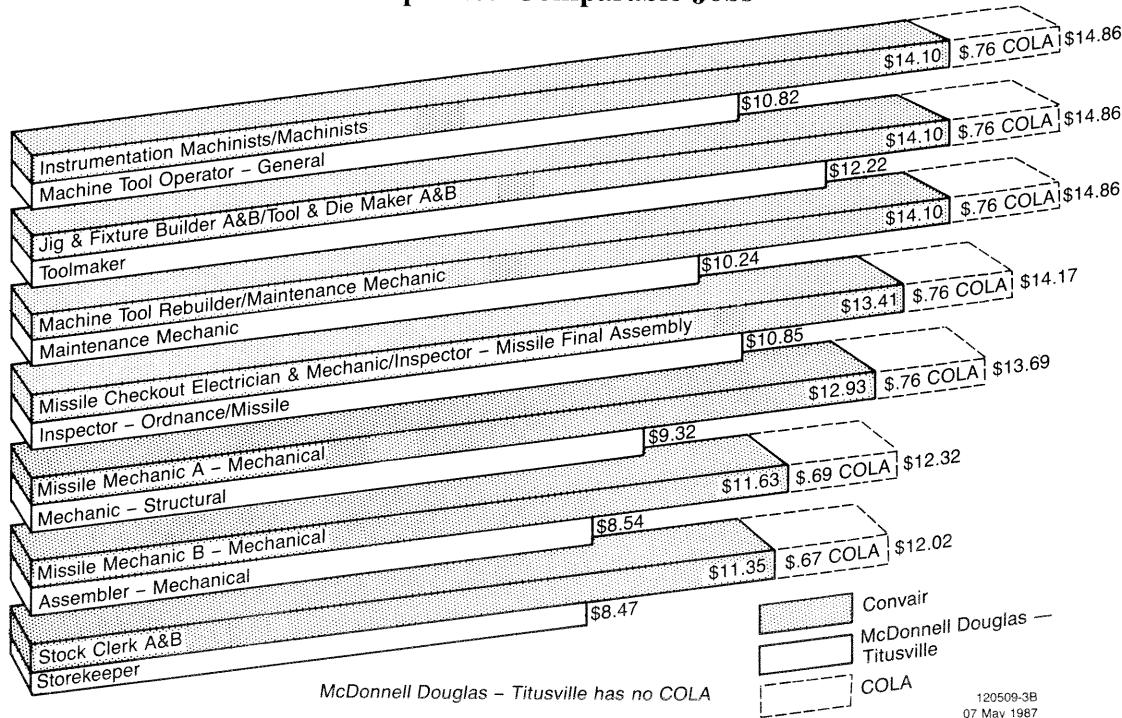
"The objectives are quality and price," explained Keel. "The government is driving for a quality product at the lowest possible price in all production programs and is using competitive tactics more frequently to achieve their objective. Therefore, we are looking at all factors that affect our ability to compete."

According to the *Post* article, "McDonnell began looking for ways to cut costs, pared down its overhead, and started production at an assembly plant in a low-wage area in Titusville, Florida."

"From the beginning we've known what Titusville wages are and that we would have to deal with that issue," explained Keel.

The chart shown here tells an important story. We aren't even close in the area of costs associated with wages. Not only are our maximum rates for the jobs shown considerably higher than Titusville, when we examined the actual populations we found that over 86% of our workforce in comparable jobs are paid over the Titusville maximums and all of our *average* rates for these jobs were considerably higher than the Titusville *maximum* rates.

MAXIMUM RATE RANGE Most Populated Comparable Jobs



But the wage issue wasn't the only area where General Dynamics came out behind McDonnell. The final numbers showed our fiscal year 1987 proposal was significantly higher than McDonnell's and that we must close the gap or we stand to lose even a greater percentage than we lost in fiscal 1987.

In addition to basic labor costs, we were not competitive in three other major areas:

- Manpower support
- Overhead costs
- Material

Keel says it's important, when we put one of these proposals together, to understand what our costs will be a couple of years down the road, when actual production is under way. Those numbers are triggered by current and projected costs associated with all of the items mentioned above.

"We are looking at every cost associated with Tomahawk and all other programs. Our bids must be competitive with the other contractors who go after this kind of business," said Keel.

In future issues of the *Weekly Log*, we will examine what we are doing to be more competitive in each of the areas mentioned above.



Space Systems General Manager Alan Lovelace presents Mike Schweitzer, Jr., 1986 U.S. Savings Bond Campaign Coordinator for Space Systems Division, with the General Dynamics Corporation Silver Award in honor of the division achieving 97% participation for the savings bond drive. This year Space Systems achieved 98.4% participation.



Present at the awarding of the appreciation certificates are, from left, George Roos, Convair division vice president — Human Resources; Judy Nutt; Sue Stoffel; and Bernie Kulchin, Space Systems division vice president — Human Resources.

Fleet-Footed and Charitable Achievement

Space Systems' Sue Stoffel (795-0) and Convair's Judy Nutt (206-0) recently received appreciation certificates for their involvement in the 1987 March of Dimes WalkAmerica/TeamWalk. Not only did they walk the full 20-mile route, but between them they raised over \$1,700. More than 70 other Convair and Space Systems people joined the team, raising over \$8,000 for the prevention of birth defects.

Plant 19 Update

Approximately one-and-a-half months ago an article appeared in the *San Diego Union*, which accused Convair of "avoiding maintenance costs" by having the Navy Public Works Center (NPWC) perform maintenance work that was Convair's responsibility under the terms of its contracts with the Navy and the Air Force. Since that time, Convair officials have met with representatives of NPWC, the DoD Inspector General, and the three military commands located at Plant 19 — the Naval Sea Systems Command, Naval Electronics Systems Engineering Center, and the Defense Contracts Administration Service —

in order to establish all facts related to this accusation.

Convair personnel have reviewed all work requests performed by NPWC at Plant 19 for the past year. Approximately one-half of these requests were for maintenance on Navy equipment (air conditioners, etc.) which is not the responsibility of Convair. For the other approximately one-half of the work requests, Convair recognized that, if requested, it would have performed the requested maintenance. However, in all these cases, the Navy tenant neglected to request this work from Convair and thereby made it impossible for Convair to perform. Convair has responded to every request made of them for maintenance services.

The representatives from the DoD Inspector General have now concluded their investigation into this issue and we are confident that their findings will be the same as outlined above and show no wrongdoing by the company related to this issue.

The Great Escape — Pinecrest Park

Our homes, our jobs, our families and friends tie us to the city; to its theatres, department stores, restaurants, museums, and libraries. Most of us enjoy city life, yet occasionally we yearn for the simplicity and beauty of the country. A visit becomes a therapeutic experience. Problems disappear — at least momentarily — and spirits are rejuvenated.

Convair Recreation Association operates Pinecrest Park, a 90-acre campground available to current and retired General Dynamics employees. Nestled in the mountains about an hour east of San

Diego, the park may be the perfect way to "get away from it all" this summer.

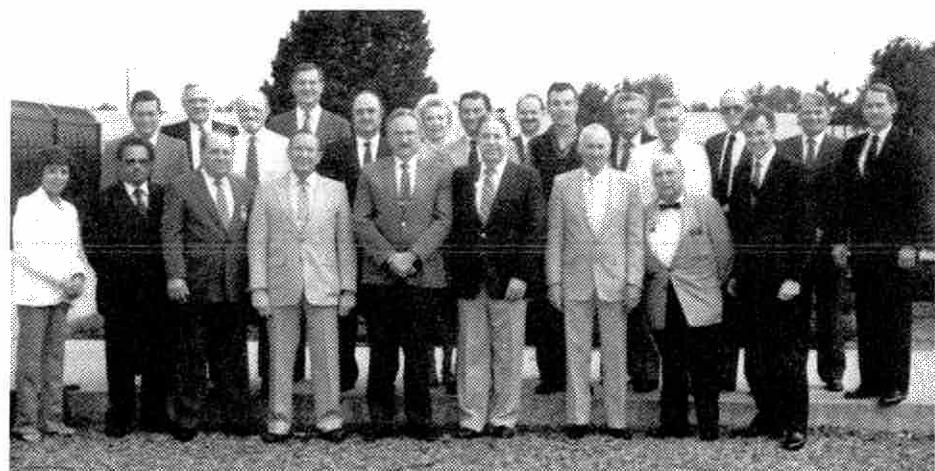
Visitors enjoy a view of mountain peaks shrouded in morning fog, green grass fields dotted with wild flowers, and evergreen forests. The site has picnic areas, permanent trailer slots, temporary RV sites for vacations or weekend camping, tent-camping areas, and storage space for trailers. It offers an Olympic-sized swimming pool, restrooms, showers, playground equipment, volleyball nets, and horseshoe pits.

Weekend visitors can hitch a hayride, view outdoor movies, or join in campfire sing-alongs. The adventuresome camper can wander away from the park to tour the old mining town of Julian, grab a fishing pole and head to Lake Cuyamaca, or hike one of many nature trails.

And if in the haste of packing you forgot necessities or miscalculated your family's appetite, don't worry. Dick Cassel, the park manager, or Stan Cornette, the assistant manager, will gladly open the convenience store to sell ice, propane, canned goods, snack foods, and more.

So the next time the "get away bug" hits, take advantage of it and your company's park. Bring your family and friends up for a day of fun, or spend the weekend enjoying the sites. Price is just \$5.00 a night per camp site or \$2.00 a day per vehicle for use of the picnic area and the pool. Camping reservations are necessary and can be made by calling the CRA, 39933, or Pinecrest Park, 765-0464.

Rental Campers Available. If you would like to spend a night camping under the stars, but don't own a tent or an RV — don't worry. For only \$12 per trailer, per night (minimum of two



At a recent service award breakfast, Convair Acting General Manager Mike Keel recognized employees for 35, 40, and 45 years of service with the company. Attending the breakfast were (front row) Rosie Lujan (35 years), Johnny Tyler (35), Ted Garcia (35), Harold Riley (45), Ken Morefield (35), Arthur Czak (35), Earl Dismukes (35), Henry Moreno (45), and Mike Keel. (Second row) Ray Clark (40), Russ Babcock (staff), Robert Moore (35), Larry Nelson (staff), Mario D'Annunzio (35), Doraine Offerman (40), Bill Cummings (35), Tom Maxwell (staff), Dale Kelley (35), Gilbert Chavez (35), Harry Van Buren (40), Floyd Branscom (35), Ken Lake (staff), and Chuck Painter (staff).

5/11/87

nights, maximum of seven), your family and guests can camp in the privacy of one of CRA's nine rental trailers.

Each is outfitted with all the necessary accommodations to make your camping trip enjoyable: beds, refrigerator, kitchen sink, stove, bathroom, closets, battery-powered lighting, water, and cleaning equipment. (Electrical hookups are not available.) All you need to bring are food, pans, paper plates, utensils, bedding, towels, and personal items.

To reserve one of these trailers, simply contact CRA at 39933. Reservations may be made up to 30 days in advance. To ensure that the trailers are properly cleaned and that no damage is done to them, a \$25 deposit is required when you make your reservation at the Kearny Mesa or Lindbergh Field CRA offices. After checking out at Pinecrest, you will be given a receipt. Take it to the CRA for your deposit refund. A minimum three-day notice is required if you need to cancel your reservation.

March Retirees

Thanks and best wishes for a happy retirement to these employees who retired in March:

Name (Classification)	Years of Service
Edwin H. Adkisson	
Missile Checkout Electrician	.....30
James R. Austin	
Pubs Tech Specialist	.....32
Richard M. Buss	
Engineering Specialist	.....35
Wilbert V. Carter	
Engineering Specialist	.....46
Robert W. England	
Launch Service Technician	.....29
Thomas I. Gillespie	
Procurement Quality Assurance	.....5
Roy E. Harders	
Loft Developer	.....29
Al R. Hermann	
Technical Buyer	.....30
Bobby J. Hilbert	
Program Control Analyst	.....15
William K. Hill	
Missile Mechanic	.....19
James W. Hoerger	
Operations Representative	.....47
Charles H. Kelly	
Quality Assurance Specialist	.....28
Amalia L. King	
Group Leader	.....21
Harry C. Litten	
Operations Supervisor	.....28
John McLean	
Engineering Specialist	.....18
William T. Mitchell	
A/C Assembler	.....35
Carlton V. Pereira	
Group Engineer - QA	.....31
John K. Roschlau	
Engineering Specialist	.....1

Paul H. Schaaf	13
Engineer - QA	.....13
Frank W. Schlotman	25
A/C Assembler	.....25
George W. Stacy, Jr.	40
Metal Fitter	.....40
Tommy L. Stalcup	30
Engineer Sr.	.....30
William R. Stout	33
Engineer Sr.	.....33
Clark Thompson	28
Technical Buyer	.....28
Raymond B. Walling, Jr.	45
Missile Mechanic A	.....45
Thomas P. Young	30
Engineering Specialist	.....30

New Space Systems Visitor Badge

Space Systems Division is implementing a newly designed visitor badge. A visitor coming to Space Systems Division on a non-classified visit will be issued a bright blue visitor badge, while a visitor with a confirmed visit request on file will be issued a blue/red visitor's badge. These badges, do not reflect a visitor's security clearance level. It is the host's responsibility to verify clearance of the visitor.

Employee Survey Action Update

Many steps have been taken toward implementing action plans from the employee survey. The *Weekly Log* will publish status reports on the various departments in its upcoming issues.

New Switchboard Hours

Effective May 18, 1987, the General Dynamics switchboard hours will be 7:00 a.m. to 5:00 p.m., Monday through Friday. Please advise offsite personnel and those on travel.

Employee Speaks at Conference

Lorice Maynard, Small Business Administrator, represented Convair at the US Hispanic Chamber of Commerce Minority Small Business Conference recently held in San Diego.

The conference, which focused on the procurement process and the opportunities available to minority groups, included a panel discussion with private-sector representatives, purchasing agents, and government officials. During the discussion, Maynard shared information regarding effective measures of selling to General Dynamics.

By participating in these events, Convair hopes to promote the economic growth and development of minority businesses.

Tool Awareness Program

The Convair and Space Systems Divisions' Tool Awareness Program (TAP) is part of a Corporatewide attempt to reduce excessive inventory associated with company-provided tools.

When tools are not returned for reissue, they must be replaced so that you can perform your assigned tasks. The elimination of the necessity to replace these items is the purpose of TAP.

You can help by purging your tool boxes, cabinets, and work benches of all company-provided tools that were not specifically issued to you in your Craftsmen's Kit when you were hired. Your cooperation will mean the right tool is available when you need it. Your directors will appoint TAP representatives who will collect these tools.

Information on the status of TAP will be provided in future *Weekly Log* updates.

Cost Competitiveness

Print Reduction

Did you know that Convair will print 4.1 billion lines of computer printouts this year? Or that Space Systems will print 120 million lines? We have joined a paper reduction drive with a reduction goal of 10%. Please review all your reports. Can you eliminate some reports by sharing a copy with someone in your area, or changing a daily or weekly to a monthly or quarterly — even eliminating the report altogether?

Please do not reduce report copies with the intention of getting duplicate copies at Graphic Reproduction: one copy of 100 pages costs over \$13.

A questionnaire has been distributed — Recipient Turnaround Document — to everyone on the report distribution lists. Please take the time to fill it out and return it to Data Systems Division, or take the report header sheet and write your change, name, extension, date, and mail to W1-5431.

Parking Lot Thieves

It Did Happen to Us

The following article reflects the experience of the victims of a recent theft in the General Dynamics parking lot.

The excitement began weeks earlier during the initial planning of the trip. It escalated Wednesday night as our rented van was packed, and peaked Thursday when the clock struck noon. It was then that we six buddies, employees at Space Systems, signed our time cards and locked our desks to begin a five-day skiing vacation at Lake Tahoe. The adventure ended abruptly in the Kearny Mesa parking lot west of Building 26.

There we discovered that our van — which only a few hours earlier contained suitcases, coolers of food, sleeping bags, a portable radio, cassettes, skis, boots, poles, jackets, cameras, lenses, and film — was empty. A thief had stripped it and us victims of thousands of dollars' worth of personal possessions. In that moment, when the reality of the situation hit, our dream of visiting a snow-covered skier's paradise turned into a nightmare of anger, frustration, and paperwork.

It wouldn't bother us as much if this were just a freak occurrence — if we were just unlucky — but theft and vandalism are common problems in the parking lots. It's time for employees to cooperate with the security team. We need to function as an extra pair of eyes for the department. Any unusual behavior observed in the lots should be immediately reported to the Emergency Control Center. The caller doesn't even have to identify himself.

In retrospect, we realize we took a chance that Thursday morning when we brought the van loaded with equipment to work. Unknowingly, simply because we were anxious to start vacation, we risked our belongings. Remember, if it's of value to you, it's of value to the thief.

It's too late for us — at least this time — but maybe by sharing our story, fellow employees won't have to experience theft first-hand.

Ethics Dilemmas

What is the responsibility of supervisors to their employees concerning ethical dilemmas? What is the employee's responsibility?

Under the *Standards of Business Ethics and Conduct*, supervisors hold certain defined responsibilities to the employees under their supervision. They should:

- Ensure that all current and new employees have participated in Ethics Program education and training.
- Periodically review employee knowledge and understanding of the *Standards of Business Ethics and Conduct* booklet and provide educational refresher programs as necessary.
- Stress to all employees the need for a continuing commitment to ethical principles.
- Maintain a workplace environment that encourages frank and open communication regarding the importance of operating in an ethical manner.

At the same time, as employees we all have specific responsibilities.

- Employees should be alert and sensitive to situations that could result in illegal, unethical, or improper actions.



Members of the Cruise Missile Tailcone Subassembly team are responsible for turning around schedule.

Team Effort Works

In an industry notorious for deadlines, it is inevitable that occasionally schedules run late. Turnarounds can and do happen, however. Recently, thanks to the dedication and commitment of the Cruise Missile Tailcone Subassembly team and to the im-

plementation of productivity improvements, one such recovery occurred on the cost and schedule deficit in the FY87 budget. Convair congratulates the employees for overcoming constraints while maintaining outstanding quality.

- If or when it appears that a fellow employee is in violation of company rules and regulations, employees must bring the situation to the person's attention and, if not voluntarily corrected, to the attention of those to whom responsibility for discipline has been assigned.
- Specific ethical responsibilities of employees are defined by the company in education and training programs. Your questions should be directed to your supervisor or to the Ethics Hotline (Convair, 38120; Space Systems Division, 38367).

C/SCSC Review Scheduled

A Cost/Schedule Control System Criteria (C/SCSC) review of the Space Systems Performance Measurement System will be conducted May 11-22. During that period, a 12-person team headed by Captain Jim Rego, review director, and Tony Finefield, review chief, will conduct extensive reviews of the Space Systems SIMS II Performance Measurement System. Upon completion of this two-week review, it is anticipated that the division's C/SCSC system will be recommended for an R&D Tri-Service Validation.

Space Systems PC Helpline

If you have more questions than answers when it comes to operating your personal computer (PC), don't despair: call 77193.

Space Systems Information Resource Management has established a PC Helpline to assist employees with personal computer-related questions. Janie Minguillon, a DSD Infonet representative, monitors the helpline and is available to answer PC questions.

Air Show

The Soviet MIG-17 and the U.S. F-86 and P-51 owned the skies during the 1950's. On May 16 and 17 they will once again fly as part of the "Planes of Fame" Air Display held at Chino Airport. Discount tickets are available at the CRA.

For more information, call (714) 597-3722.

Employment

For the week ending May 1, Convair Division employment was 8,980; Space Systems Division employment was 2,748.

CONVAIR

WEEKLY LOG

May 18, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Cost Competitiveness

Future Challenges

At the General Dynamics Annual Meeting of Shareholders, held in San Diego May 7, Chairman and Chief Executive Officer Stanley C. Pace addressed the competitive challenges facing the defense industry and General Dynamics' commitment to taking the necessary steps to "solidify our position as a leading defense contractor."

Pace stated that the corporation is committed to capital spending at an annual level of about \$400 million and to corporate-sponsored research and development of about \$250 million.

"These expenditures will enable us to maintain our technological leadership and improve our productivity, both essential for building the competitive edge we will need to remain successful under the new approaches in defense procurement," Pace said.

"As you are aware, the current trends evidenced in the industry are expected to continue in the immediate future," he added.

Pace then addressed the reality of current trends in the defense budget that already have created a fiercely competitive situation, with fewer, more complex, expensive, and risky military programs to compete for in an environment of increasing cost competitiveness.

Adjustments To Be Made In Convair's Work Force

Convair is announcing today that over the next seven months it will reduce its work force by about 700 employees. This reduction in force is required to rebalance the work force to match the division's upcoming product mix and resultant job requirements.

"It concerns us that we will be losing the talents and skills of some fine people," said George Roos, Convair Division Vice President — Human Resources. "However, to balance our requirements, we must take positive actions now to ensure that we have the right people in the right jobs to effectively build and deliver our evolving product mix."

Roos said that reductions, some of which will include normal attrition, will involve both hourly and salaried employ-

"In order to achieve a level of cost-competitiveness as excellent as our technical performance, we have initiated a corporatewide program to identify and implement measures that will significantly improve our competitiveness in such areas as cost reduction, cash generation, capital management and business development," Pace said.

"I am confident," he added, "that our employees will give these efforts the same enthusiastic support they gave the implementation of our administration action programs in 1986."

Despite achievements in the core businesses, Pace said the loss of some price competitions in late 1986 and early 1987 made clear the need for a renewed emphasis on making more cost-effective and cost-competitive products.

Pace concluded his formal remarks by listing business opportunities in the defense sector, including: the advanced tactical fighter, the advanced air-to-air missile, the rolling airframe missile, the SSN-21 class attack submarine, advanced or follow-on versions of cruise and tactical missile systems, and the advanced family of armored vehicles.

During the question and answer portion of the meeting, Pace strongly stated that rumors that General Dynamics is negotiating to sell the Convair and Space Systems divisions to McDonnell Douglas are absolutely false.

ees. Hourly people will be handled per the provisions of the applicable collective bargaining agreements. Roos also announced that Convair will be activating a career continuation center in the near future for those personnel not represented.

The division has retained the outplacement consulting firm of Drake Beam Morin, Inc., who will conduct career workshops at the Center to provide assistance to affected employees in resume writing, job marketing analysis and interviewing skills. Other divisions of General Dynamics will review the Convair layoffs in an effort to match individual job skills to their requirements.

The Career Center will also make available classified job listings from major newspapers. Additionally, a selection of major trade publications listing job openings will be posted at the Center.

Atlas Continues Successful Launch Record

Congratulations to the Atlas team for the successful launch of Atlas 6005H from Vandenberg Air Force Base.

This was the fifth successful flight of an Atlas H vehicle.

Supervisors Meeting

On May 13 and 14, supervisors from throughout the Convair organization attended the first of a series of "All Supervisors Meetings."

In a message prepared by Mike Keel, acting general manager, the meetings were explained as part of an ongoing effort to improve communication with all Convair employees.

Keel's message stated, "Many employees throughout General Dynamics have heard the need for each division to become more competitive...the challenges we face are intense.

"We are in a period of change such as this organization has never experienced. To be able to meet these challenges, the people within our company must understand what we face and the role they play in meeting our challenges.

"This clearly requires a much stronger commitment to internal communication. The nature of our business thrusts us into the local and national media on a regular basis and we cannot control when that occurs. But we do have control over how we communicate with one another within our organization, and I want to do a better job."

Keel made a commitment to providing more information to all employees, and asked the supervisors in attendance to be sure those who report to them are informed of the subjects covered during the meeting.

Makeup Training for Convair

The following Convair makeup training classes will be held Tuesday, May 26, in KM building 17, room 2.

Ethics	7:30-11:30 a.m.
Overhead Expense	
Reporting	12:30-1:30 p.m.
Time Cards	1:45-2:45 p.m.
Security	2:45-4:30 p.m.

If you need to attend one or more of these classes, contact your departmental training coordinator.



At a recent service awards breakfast, Space Systems Division General Manager Alan Lovelace recognized employees for 35, 40, and 45 years of service. Attending the breakfast were (front row, from left) Mrs. Paul O'Dell (wife of one of the recipients), Arlona Diggins (35 years), Ivy Baughman (35), Alan Lovelace, and Sam Contasti (40). (Second row) Will Buxton (staff representative), Marty Winkler (staff), Paul O'Dell (45), Allen Jones (40), Don Moore (staff), Jack Hotz (35), Maurice Tompkins (35), Jack Coffman (staff), and Murray Ogman (35). (Third row) Ron Stoneburner (staff), Jim Dietz (staff representative), Jack Walk (35), Jack Easton (35), Aldo Hall, Jr. (45), and Vernon McKerrihan (35).

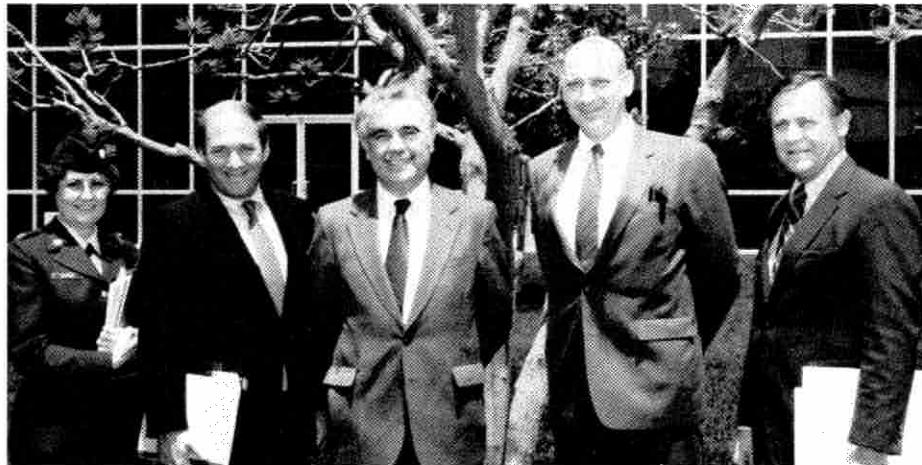
Plant 19 Update

In the March 22, 1987 issue of the *San Diego Union*, an article stated accurately that General Dynamics (Convair) is permitted by the Air Force to use Plant 19 lease- or rent-free. The article was, however, silent or misleading in the particulars of that relationship.

Plant 19 is known as a "Government-Owned, Contractor-Operated" (GOCO) facility. Under this arrangement, Convair is permitted to use the facility on a rent-free basis in the performance of government contracts. However, Convair does pay rent for any portion of the facility or equipment used for commercial purposes.

All aspects of the government-Convair relationship regarding Plant 19 are authorized and governed by the Federal Acquisition Regulation, certain Air Force regulations, and a facilities contract negotiated between the Air Force and Convair. Under these regulations and the contract, Convair is obligated to perform maintenance in accordance with a government-approved maintenance plan at no direct cost to the Air Force. In addition, Convair administers all other capital-type projects funded by the Air Force on a cost-only (no fee) basis.

The government benefits not only by having a "landlord" to maintain and administer the facility and by reduced costs on contracts performed wholly or in part at Plant 19, but also by maintaining a government facility in support of peacetime efforts and providing a facility for unanticipated "surge" production requirements.



From left are Lt. Col. Jean Oestreich, USAF, executive assistant; Marty Winkler, division vice president - Research & Engineering; Dr. Gordon Smith; Dave Freiwald; and Capt. John Dewey, USN, external affairs.

SDIO Deputy Director Visits Space Systems

On May 12, Dr. Gordon Smith, deputy director - Strategic Defense Initiative Organization (SDIO), visited Space Systems Division for a complete overview of all the SDI work currently being done by General Dynamics.

Smith's visit included a tour of the facilities and discussions of the General Dynamics interdivisional studies being done for SDI: Killer Bee; launch vehicles; producibility; Advanced ASAT (Anti-satellite); Space Sensor concepts; and energy programs.

According to Space Systems' David Freiwald, director of SDI programs and interdivisional coordinator, "Dr. Smith

Convair PC Software Duplication Policy

In our continuing effort to comply with personal computer software copyright laws, Convair employees are responsible for personal computer software issued to them and will be required to sign a statement stating that they are aware of Convair Division Personal Computer Software Duplication Policies & Guidelines.

Additionally, stickers will be affixed on all new and existing personal computer software which state, "Convair Policy Prohibits Unauthorized Reproduction of Software. Generally, One Backup Copy of the Software is Authorized." Policy statements and stickers for existing software will be given to supervision for distribution in June.

Unannounced, periodic audits of company computer use could be conducted to ensure that resources are being used properly.

If you have questions on the above policies, please contact Susan Malone, 68617.

and his staff were very impressed with the work that we are doing on SDI."

"I have visited all of the major firms involved in SDI work," Smith told General Manager Alan Lovelace. "You people are far ahead of the pack in the work you are doing in developing low-cost, high-volume production concepts for the SDI, which is what we need in order to make the SDI cost effective."

Employment

For the week ending May 8, Convair Division employment was 8,957; Space Systems Division employment was 2,746.

Notice: No Weekly Log the week of May 25. Have a happy and safe Memorial Day holiday!

Published by General Dynamics Convair & Space Systems Divisions

The following letter was recently received by Mike Keel, Convair Acting General Manager.

On 14 May 87, the DCASPRO staff verified and validated the last of the 254 corrective action plans which we have been monitoring as a result of the SSR/COR conducted in October 86.

Over the past seven months, Convair Division personnel have dedicated themselves to identifying the root cause of each deficiency. Your staff then identified the responsible organization and set about developing and implementing corrective action plans which corrected the instant discrepancy and, as appropriate, revised and established procedures, processes, standard practices and other controls to help insure that generic/system-related problems do not reappear.

The past eight months, including the SSR/COR itself, have been ones of intense activity for many key members of your staff. On 14 October 86 I wrote to thank you and each Convair employee for the outstanding job you did supporting the SSR/COR. With the completion of the corrective action phase, I would like once again to thank and congratulate you and the dedicated Convair employees for the initiative and drive you have demonstrated in your efforts to meet all contractual requirements.

We know there are a number of problems noted outside the SSR/COR, the corrective actions for which have not been resolved. I am certain we will reach satisfactory resolutions of these issues in the same spirit of cooperativeness that Convair has demonstrated in resolving the SSR/COR findings.

The coming months and years will challenge all of us in assuring that we have in place systems and procedures which meet the letter, spirit and intent of our contractual obligations in an economical and cost-effective manner which the current competitive environment requires. I feel confident that through higher-level management involvement and mutual cooperation we will meet the challenge.

Sincerely,



D.D. Christopher
CAPT, SC, USN
Commander

Competitive Action

Procurement Competitiveness

Part 1 of a 2-part series

Convair managers who attended the Supervisors' Meetings earlier this month heard George Roos, Division Vice President - Human Resources, describe some of the competitive challenges facing the company. One of the areas discussed was the cost of material. The following interview with Russ Babcock, Division Vice President of Procurement, describes some of the actions his department is taking to control costs and be more competitive.

Question: Is it necessary for Convair to have approximately 6,000 vendors? Why is the number so much higher than McDonnell Douglas?

Babcock: The 6,000 number includes all suppliers who have indicated an interest in doing business with Convair and have been accepted. Approximately 300 of those companies are active suppliers on Tomahawk. However, the principle still exists that the fewer number of good, qualified suppliers we have, the less money we are going to expend on follow up, supplier interfaces, inspectors, and overall documentation.

We are making a concentrated drive to reduce the number of suppliers while still maintaining a good competitive base. Only the best companies will survive these cuts.

Question: Can suppliers increase their prices once they have been specified for a particular program like the Tomahawk?

Babcock: In years past, many suppliers attempted to buy in to business with a low initial price and once qualified — through an expensive testing process — attempted to inflate their price as changes occurred, feeling they were locked in as a source.

It's our practice to negotiate long-term cumulative pricing agreements that drive the suppliers' costs down a reasonable learning curve and commit the company for several years into the future, thereby preventing this problem.

Question: Is it possible for a second source company to get price breaks from these suppliers?

Babcock: In all cases, we insist that our suppliers certify they are giving prices to us that are no less favorable than the prices offered to other companies for the same items under similar circumstances.

The only opportunity for our competitors to achieve better pricing is to combine a program like Tomahawk with other business so they are buying in larger quantities or to obtain different suppliers offering lower prices.

(To be continued)

Employee Survey Action Update

The employee survey has moved smoothly from the feedback stage through the action planning stage. During February, March, and April, employees at Convair were working with their management suggesting solutions to problems identified during the feedback sessions. Each work unit concentrated on issues which management at that level could resolve. The managers' action plan then was shared with the next level manager.

We are now at the point where the division level plans are being completed. Mike Keel, Convair's acting general manager, took the Convair division action plans back to Corporate Office May 22. The division action plans soon will be communicated to Convair employees. Corporatewide plans also will be addressed and communicated.

This whole process is designed to open two-way communications to make decisions that will improve company effectiveness.

Time Card Discipline

Over the past few months, Convair supervisors have been making early-morning time card checks to ensure that TDCs are current and accurate, a process that has produced significant results in error reduction.

To extend this improved performance throughout the day, Mike Keel, acting general manager, has issued a requirement for supervisors to perform their daily checks at random times throughout the day rather than strictly first thing in the morning.

"I am confident," Keel said, "that with this added attention, our time card performance will meet the criteria for accuracy and timeliness which we need to satisfy ourselves and our customers regarding our labor charging practices."

Space Systems Survey Newsletter

The quarterly survey update newsletter, detailing survey issues and action plans, was distributed on Wednesday, May 20.

If you did not receive a copy, call Lisa Lawrence, 77833.



Captain Donald Christopher, SC, USN, commander - DCASPRO, General Dynamics, San Diego, recently held a "Captain's Call" to celebrate Asian Pacific Week. A presentation was offered by guest speaker Ernie Flores from Congressman Jim Bates' office, providing fresh insights into some of the special history of the Asian Pacific Cultures.

Major Dan Thorsen, USAF, executive officer - DCASPRO, said these meetings are held periodically to give DCASPRO employees an opportunity to get together, and at the same time to promote intercultural awareness and appreciation. Above, Ernie Flores (right) and Captain Christopher (second from right) prepare to sample the Asian Pacific delicacies of the intercultural buffet with DCASPRO employees.



(From left) Peter Haney, Dan Nash, Mark Long, Tim Whitehouse, Mike Ozaki, and Nancy Mumford.

Group Excel Award

Convair's Nancy Mumford, Mike Ozaki (Art & Editorial), Tim Whitehouse, Dan Nash (Still Photography), Mark Long (New Program Development), and Space Systems' Peter Haney (Manufacturing Engineering), were recently awarded a Group Excel Award for their contributions to the 1986 Operations "Productivity Innovations" brochure.

Each of them saw to project planning and coordination, art and editorial, and photographic support of the highest professional quality. The 1986 brochure was one of the most successful to date, and its publication required a tight schedule.

Our congratulations to each on the team. Theirs is an example of what can be accomplished when people work together with a common goal and pride in detail.

Parking Lot Safety

In order to ensure the safety of all employees and facilitate traffic flow, it is important that we all observe the following basic guidelines:

- Yield to pedestrians. Pay particular attention to cross-walks on Electronics Way and Convair Road at Kearny Mesa.
- Obey all regulatory signs.
- Remember that the maximum speed limit in the parking lot is 15 MPH.
- Be cognizant of which two-way traffic lanes become one-way traffic lanes from 3:30 p.m. to 5:00 p.m.
- Always "head into" angle parking spaces.
- Park in authorized spaces only.

Your cooperation and courtesy in complying with the above reminders are greatly appreciated.

Bulletin Board

SIGART. An ACM special interest group for artificial intelligence will meet at 6:30 p.m., May 28, at UCSD Humanities and Social Science building, room 1128. Dr. Paul Churchland will discuss the emerging theories of brain function and cognitive dynamics. For information call 584-6606.

Employment

For the week ending May 15, Convair Division employment was 8,937; Space Systems Division employment was 2,740.

CONVAIR

WEEKLY LOG

June 1, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Attending the Offset Vacation Travel Show were, from left, Joyce Hilton, Corporate Offset Travel assistant; Toby Johnson, Percival Tours; Paul Cofoni; George Brakeall; Nazli Weiss; John Wickershamb, division vice president - Electronics Division Human Resources; and George Roos, division vice president - Convair Human Resources.

Retiree Wins Offset Travel Show Grand Prize

General Dynamics' Corporate Offset Vacation Program coordinators and representatives from Convair, Electronics, Space Systems, and Data Systems divisions recently hosted their first combined Offset Vacation Travel Show in San Diego. More than 700 employees, family members, retirees, and vendors attended the show that introduced the program's tours to Korea and Turkey and provided information about the new interest-free loan process.

George Brakeall, a retiree from Electronics Division, won the grand prize — an all-expense paid trip to Hong Kong and Seoul Korea. Paul Cofoni, Vice President and Center Director for Data Systems Division-Western Center, drew the lucky winner.

With the flexibility of the Offset Vacation tours, George, or anyone who participates in the discounted programs, can also take advantage of many side trips to other spectacular cities and countries.

During the Travel Show presentations, Toby Johnson of Percival Tours gave details and travel tips for vacationers to the Orient. She also discussed some of the features of the one-week tours, including transportation, hotels, sightseeing trips, and many other extras. Also, she said, the tour package prices have remained the same as last year.

Nazli Weiss, Manager of International Offset Tourism, talked about the tours to Turkey, including discounts of up to \$200

per couple, air transportation on KLM Royal Dutch Airlines, first-class hotels, most meals and other features. She also discussed the interest-free loan program for eligible employees who want to participate. Loans may be taken for a maximum of \$5,000 and must be repaid within two years. Certain other restrictions apply.

The show was so successful that the four San Diego Divisions are already planning another program for the fall.

For more information and brochures about the Offset Vacation Program, you may contact Norma Hensiek at Travel Services, 77660, or call Percival Tours toll-free at 1-800-527-8448.

Competitive Action

Procurement Competitiveness

Part 2 of a 2-part series

The following is the second part of an interview with Russ Babcock, Convair Division Vice President - Procurement, describing some of the actions his department is taking to control costs and be more competitive.

Question: What are the people in the procurement department doing to deal with these competitive issues?

Babcock: We are recompeting every item wherever opportunities exist, and we are carefully evaluating "Make versus Buy" costs to assure we are pursuing the most competitive approach.

Question: How soon do you expect to see a reduction in suppliers and, in turn, related costs?

Babcock: We have already seen some impact, but it will be a few months before we'll see the effects of the decisions we will be making.

Question: Will reducing the number of suppliers solve our problems?

Babcock: No. A lot of the costs we incur are attributed to our own internal systems and the way we perform as a team.

For example, a couple years ago we decided to track a part request from engineering to our buyer, who ultimately had to place the order. In tracing the paper through our system, we found the average flow time was 31 days. We had become so departmentalized, so dispersed geographically, with each organization making their input to the requisition file, that a requirement could wait days for any one individual in the cycle to return from a business trip, vacation or sick leave — not to mention other routing problems.

We got together all the people associated with the process and came up with a way to cut the flow time to a couple of days. We eliminated a lot of repetitive processing, computerized most of the system, and cut out the majority of the steps that had built up over the years.

Question: What else are we doing to become more competitive?

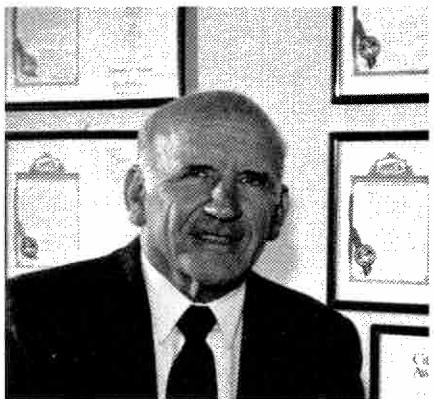
Babcock: Our costs aren't just associated with the prices of basic materials and initial processing of paperwork. Procurement and all supporting functions must make sure the material gets here at the right time. If it's late arriving we have high costs due to the loss of valuable production time and, of course, this problem is compounded if the material is poor quality. If the material gets here too soon, we have the added costs of carrying the inventory.

In the Procurement department, we are soliciting suggestions from suppliers as well as our own people. We are holding brainstorming ses-

sions with all our buyers and we're looking at how we can better control all of these costs.

We must simplify procedures, not overspecify materials and parts, conserve on usage, resolve problems faster, and work as a team.

As part of the Convair team, I encourage employees to contact me (28307) with recommendations or suggestions to further enhance our competitiveness.



Ed Hujasak with some of his patent certificates in the background.

Another Technology Improvement

Space Systems' Ed Hujasak, Chief Engineer, Dept. 710-4, recently received yet another patent from the U.S. Government. His latest invention is a control thruster for a space maneuvering vehicle. The single-control thruster can operate at various thrust levels and use more than one propellant, either chemical or inert gas.

Some of the advantages of Ed's invention? For one thing, it reduces by one third the typical number of control thrusters. Important fuel cost savings will be realized. On top of that, his thruster promises improved reliability over other types. They're easily removable and replaceable, making the vehicle easy to maintain.

Ed developed his new invention while working on an IRAD covering teleoperator (special spacecraft) design, an outgrowth of spacecraft maneuverstage development IRAD project. Hats off to Ed Hujasak, one of our leading inventors, and the new recipient of U.S. patent number 4,635,885.

Adjustments Made to Salaried Medical and Prescription Plans

The rising cost of medical care in the United States has become a growing concern. In 1985, almost 11% of the gross national product was attributed to these medical-related expenses. As a result of this

upward trend, employers across the nation are taking steps to curb these costs.

In keeping with this nationwide trend, as well as our company's commitment to reducing overhead expenses in order to maintain a competitive position, minor changes have been made to our salaried employees' medical and prescription drug plans.

Effective June 1, salaried employees in the Kaiser and Greater San Diego Health Plan will pay a \$5.00-per-office-visit copayment. Those currently enrolled in Convair's self-funded plan already have a copay arrangement through deductibles and co-insurance which is part of the plan design.

Adjustments also have been made for copayments on prescription drug plans. Kaiser and Greater San Diego Health Plan members will co-pay \$2.50 for prescription drugs. The self-funded plan will remain at \$1.25 for generic drugs, but will increase to \$3.00 for non-generic prescriptions.

New medical identification cards for all plans will be mailed to salaried employees within the next two weeks.

Although these changes have a relatively small impact upon us as individuals, the overall results will generate a substantial reduction in our overhead expenses, thereby further enhancing our competitive posture.

Employee Suggestion Awards

Convair Employees Have Quality Ideas

During First Quarter 1987, 155 Convair employees received Employee Suggestion Awards for their ideas which resulted in over \$330,000 savings.

The following list shows the amount of savings by functional area.

Function	Company savings	No. of awards
Manufacturing	11,820	4
Engineering		
Mfg./Material	55,710	10
Control and Scheduling		
Aircraft	2,150	8
Programs Mfg. Product Line		
Quality Assurance	34,600	22
Fabrication & Production	127,070	37
Engineering		
Research & Engineering	20,920	6
Human Resources	1,500	2
Cruise Missile Mfg. Product Line	42,780	49
ILS	3,370	1

Advanced Programs	4,860	9
Mfg. Product Line		
Plant Services	27,340	7

Security Alert

During the past two months there has been an increase in suspicious telephone calls received by General Dynamics employees at all San Diego divisions.

The callers misrepresent themselves by using phony names, or posing as employees from another division or Corporate office.

The majority of these calls have one thing in common — the requestor wants names and telephone numbers of employees within one department.

If you receive one of these calls, ask the caller to send their requests via EM/OS to the respective division Personnel office.

In addition, ask for the caller's name and phone number, and report the call to Industrial Security: Convair, 38171; Space Systems, 75089.

New Self-Service Copier Installation

By June 30, Canon copiers will be replaced at all plant locations. Each department that now has a Canon copier must train two key operators on the new copiers.

Call Mary Piper, 73401, to schedule training for the operators.

DIS to Inspect Space Systems

On June 8, the Defense Investigative Service (DIS) will inspect Space Systems Division. This inspection is not directed at Industrial Security alone. It also includes individuals from all departments who actually process classified material.

Be prepared. If you have questions or need assistance, call Industrial Security, 75325.

KM ID Office. The Kearny Mesa Identification Office has moved to the Professional Staffing area, building 1, first floor.

Receiving a degree? Please let us know. Send your name, department, and degree earned to the Weekly Log, MZ 11-1330.

Employment

For the week ending May 22, Convair Division employment was 8,931; Space Systems Division employment was 2,740.

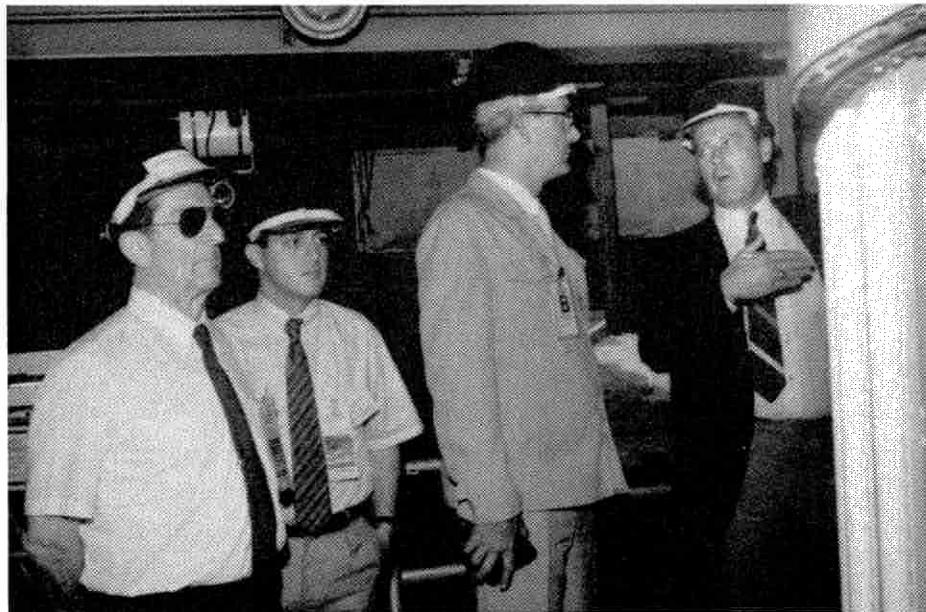
CONVAIR

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June 8, 1987

SPACE SYSTEMS

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Members of the EUTELSAT Consortium receive a first-hand tour of Launch Complex 36B at Cape Canaveral. From left to right are Andrea Caruso, Francesco Caruso, Eric Moulaert, and Space Systems' Sy Baker.

EUTELSAT Director Visits Space Systems

The European Telecommunications Satellite Organization (EUTELSAT) Director General Andrea Caruso visited Space Systems Division the week of June 1 to discuss commercial launch services. Caruso was accompanied by his son, Francesco, Eric Moulaert - manager of EUTELSAT Space Launch Activities, and Jean-Jacques Dumensil - manager of EUTELSAT Satellite Procurement.

The purpose of the visit was to assess Space Systems' commitment to the commercial launch service business, to discuss

details relating to the potential sale of launch services to the EUTELSAT Consortium, and to review the Atlas/Centaur accommodations for EUTELSAT payloads.

The European guests were provided with a tour of Cape Canaveral and Space Systems' launch complex, Western Test Range facilities at Vandenberg Air Force Base, and the San Diego plants. They also were briefed by General Manager Alan Lovelace's staff on the division plans for commercial launch services.

Caruso's visit culminated with a trip to St. Louis for formal discussions with General Dynamics' Chairman Stanley Pace.

tracking progress of implementation, and communicating results to employees.

The *Weekly Log* will periodically inform you of these actions, and information centers will be established within departments to keep you assessed of progress.

NMA Dinner Meetings

The National Management Association Space Systems Chapter is hosting Corporate Night on Wednesday, June 10, at the Town & Country Convention Center. Ollie Boileau, President of General Dynamics, is the featured speaker. Tickets are \$15 for NMA members, and \$21 for nonmembers. For information, call Glorene Anderson, 75577.



Mike Keel (right) presents Bill Rose with Suggester of the Year awards.

Rose Named Convair Suggester of the Year

Bill Rose, a senior Financial Specialist in Department 194-5, recently received the 1986 Convair Suggester of the Year Award from acting General Manager Mike Keel.

Rose submitted a key Employee Suggestion when he was working as a Senior Estimator in Department 111-0. His suggestion to modify the calculation of facilities-related costs has been incorporated by Contracts & Estimating. Space Systems also gave Rose an Employee Suggestion Award when it incorporated his idea.

In addition to the Convair Suggester of the Year Award, Mike Keel presented Rose with a 1986 Corporate Award for Outstanding Performance as Suggester of the Year.

The *Weekly Log* salutes Bill Rose. He is an example of employees who are committed to increasing efficiency, improving quality, and reducing costs.

The NMA Convair Chapter's Scholarship Night is Thursday, June 18, at the Hanalei Hotel. Colonel Charles Scott (former hostage in Iran) is the featured speaker. Tickets are \$9.00 for NMA members and \$19.90 for nonmembers. Call 75240 for information or table reservations.

During Scholarship Night, a vote to ratify the chapter constitution also will be held.

When people are in an atmosphere of trust, they'll put themselves at risk; only through risk is there growth . . . reward . . . self-confidence . . . leadership.



Seated (left to right) are the Corporate Competition Advocates: Fred Acomb - Electronics, John Petty - Land Systems, "Hoot" Kaufman - Fort Worth, Merle Aleshire - Convair, Joe Simons - Corporate Office, Bill Senior - Electric Boat, Ron Tuley - Valley Systems, "Barney" Barnett - Pomona, and Tim Goffar - Space Systems. Joe Alcala has recently replaced Goffar at Space Systems.

Competition Improves Competitiveness

The General Dynamics Competition Advocacy Program is setting the standard for subcontract competition in the aerospace community.

This industry model was initiated by General Dynamics in 1985 and is now in full bloom. The objective is to obtain high quality products, on schedule, at the most competitive prices. This can best be accomplished by maximizing competition where it makes good business sense and through good subcontract management of a select group of outstanding competitive suppliers.

Competition Advocates at the various divisions and the corporate office are responsible for:

- Ensuring maximum competition on new programs.
- Developing competition improvement plans on established programs.
- Participating in make/buy policy.
- Reviewing source/specification control drawings.

- Reviewing noncompetitive procurements.
- Communicating competition programs to employees.
- Submitting periodic progress reports to our customers.

We must all do our part in assuring that we retain competitive alternatives in our procurements. This starts with alternative conceptual design approaches, no exclusive teaming agreements that restrict competition in downstream program phases, at least two sources on all released engineering, and streamlined responsive procurement practices. We can and must improve our productivity in all of these areas to remain competitive.

Merle J. Aleshire is the Convair Director of Competition and Ben Wier and Tom Zeran are the Competition Advocates for Tomahawk and Advanced Cruise Missile, respectively.

Aleshire says we should keep our goal clear and simple: "Two-or-more suppliers on all drawings is the key, just two-or-more is our motto."

Police Reserve Officers Needed

Many Convair and Space Systems people serve their San Diego community by volunteering as Reserve Police Officers. The San Diego Police Department is currently recruiting reservists, and you might qualify to join some of your coworkers in this important and challenging service.

Not all of the tasks reservists perform are simple. Many are demanding physically and emotionally, but the rewards are great.

If you are interested in becoming a San Diego Reserve Police Officer, call 232-6038 or 531-2240.

New Self-Service Copier Installation

By June 30, Canon copiers will be replaced at all plant locations. Each department that now has a Canon copier must train two key operators on the new copiers.

Call Mary Piper, 73041, to schedule training for the operators.

Employment

For the week ending May 29, Convair Division employment was 8,911; Space Systems Division employment was 2,729.

April Retirees

Thanks and best wishes for a happy retirement to these employees who retired in April:

Name (Classification)	Years of Service
Rita Bonnell Secretary	28
Dwain B. Bowen Project Engineer	9
Ruckman G. Byrne Software Design Specialist	17
Andrew Capossere Engineering Drawing Checker	36
Josephine R. Charity Group Leader	27
Lucy H. Clover Secretary	31
Pablo B. Cristobal A/C Assembler	16
Frederick P. Duschak Milling Machine Operator	17
Raymond W. Eichmann Engineering Specialist	34
Hobart R. Freeman Tool & Manufacturing Engineer	22
George A. Hillis Material Project Analyst	33
Donald E. Jay Quality Assurance Specialist	8
John D. Kring, Jr. Project Engineering Director	34
William H. Lakin Manager - Estimating	31
Ted L. Lamoureux, Jr. Chief-Quality Assurance	31
Charles L. Marks Quality Engineer	36
Raymond D. Pezzello Publications Tech Specialist	5
Joan E. Sherley Program Manager	31
Frank C. Spath Launch Service Mechanic, Sr.	26
W. Gene Tillerson Engineering Specialist, Sr.	13
Morgan E. Williams Manufacturing Dispatcher	28
John E. Woods Engineering Illustrator, Sr.	18
Arthur Wrightson, Jr. Estimating Specialist, Sr.	40



Space Systems' Lori Gorski (Department 830-2) recently was awarded a Pacesetter Certificate by her supervisor, Eugene Perkins. Lori was recognized for the exemplary manner in which she assisted the Space Transportation Architecture Study group.

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June 15, 1987

SPACE SYSTEMS

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John Bodle, left, is congratulated by Marty Winkler, vice president - Research & Engineering.

Patent Awarded Space Systems' Bodle

The U.S. Patent Office granted patent number 4,653,951 on March 31, to Space Systems John Bodle, director of Structures and Mechanical Systems. His invention is a zero-free-play joint for deployable space structures.

This device was invented while John was working as Principal Investigator on the Advanced Space Structures Technology IRAD in 1983. The primary purpose of this joint is to eliminate all post-deployment free-play in the hinge joints of space structures and to provide a low-resistance path for thermal and electrical conductivity across these joints.

MICOL Audit Satisfactory

The DCAS annual Government Property System Survey of the Convair Material Inventory Control On-Line (MICOL) system was recently conducted. The five categories of records, storage and movement, consumption, utilization, and physical inventory were audited with no discrepancies identified.

The DCAS conclusion was that all categories audited were found to be satisfactory. Congratulations to everyone who played a part toward this major accomplishment.

New Self-Service Copier Installation

By June 30, Canon copiers will be replaced at all plant locations. Each department that now has a Canon copier must train two key operators on the new copiers.

Call Mary Piper, 73041, to schedule training for the operators.



Convair ESCC Holds Kickoff Meeting

On June 5, members of the Employee Survey Communications Committee (ESCC) gathered to discuss plans for communicating status and implementation of issues identified during the Employee Survey feedback sessions. From left (seated) are John Barrons, Fran Richardson, Fran Cannon, Pat Brown, John Newman, and Bobbie Alex. (Standing) Cal Samuels, Chuck Simmons, Joanne Kowalik, Don Berhow, Andy Frank, Carman Dawson, and Barbara McDonald.

New Employee Development Guide For Convair

Management Development has updated Convair Division's *Employee Development Guide* and the *Supervisor's Guide*. These important booklets give our supervisors valuable resources needed in order to assist selected employees with career and professional development.

The employee guide contains three guidebooks addressing self-appraisal, exploring opportunities, and planning for action. The supervisor guide is designed to provide each supervisor with the information needed to counsel and support selected employees through the guidebook.

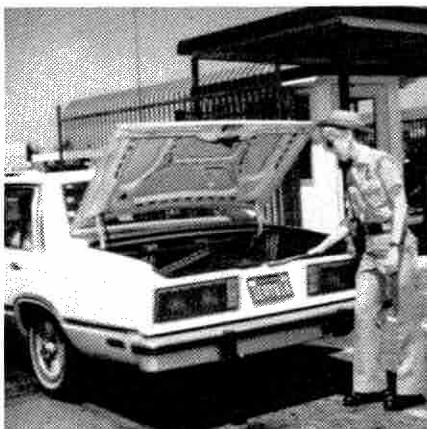
With the proper use of the guidebooks, a mutual benefit can be achieved for the division and for the motivated employee. Using the recommended processes in the books, supervision can increase their knowledge of the employees' skills and career objectives. The result can be increased productivity

through a more effective utilization of the employees' skills, while demonstrating to employees that their career objectives are important.

The process was developed for supervision to use on a selective basis. It is designed for employees who demonstrate, through attitude and performance, a motivation toward career and professional development and a desire to be productive and effective.

Management Development will provide supervisors, upon request, a copy of the guide to enable them to familiarize themselves with both guidebooks. Supervisors can obtain the employee guidebook for those employees they feel have demonstrated the initiative to use the process. Employee development is the shared responsibility of the company, the employee, and the supervisor.

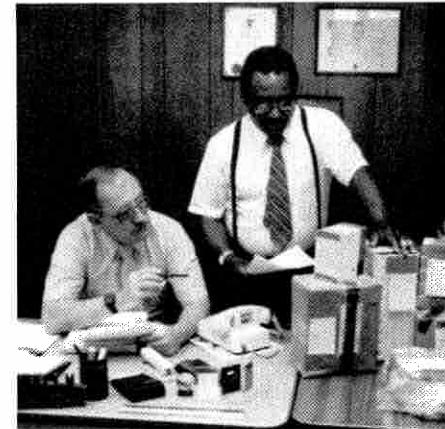
To receive the guides and for additional information regarding their use, contact Tom Crow, 39950, or Marilyn Kistler, 38049. They are located at Kearny Mesa, building 3, third floor, column D-2.



Checking vehicles as they enter and exit the plant is one of Carol Williams' duties.



Charles Sanfilippo (left) and Frank Bourbeau, Emergency Control Center (ECC) operators, monitor the security screens and respond to emergency calls.



Investigators Bob McAnelly (left) and James Johnson are shown with part of the General Dynamics' property recovered during theft investigation.

Plant Protection Department

A Twenty-Four-Hour Job

It is no secret that our workplace practices tight security procedures. Every morning and every evening — in fact every time we leave the plant — we are reminded of this by the plant protection officers who stand guard at the gates. For the most part this causes us little concern, since we are employed by a major defense contractor and are aware of the importance of maintaining a secure environment.

Security is a twenty-four-hour job for the Plant Protection Department. It is their duty to safeguard the people, property, and paperwork of the company. And they do a good job. A glance at the activities which have occupied their work days the past few weeks confirms the truth of that statement.

Monitoring the plants' entrance gates is perhaps the most visual aspect of the job. Every closed container and car that enters or leaves the plant is searched to ensure that

proper clearance accompanies all documents and controlled materials. The searches are effective. In a recent two-week period, officers found over \$2,000 of company property in the trunks of vehicles. Security advises drivers to know the contents of the vehicles they transport into or out of the plant. Citations will be written if property is found without the proper clearance.

The department is also responsible for the patrol car and the TV cameras which monitor the employee parking lots at Kearny Mesa and Lindbergh Field. Because General Dynamics does not assume responsibility for vandalism to, or theft of, employees' vehicles parked in its lots, Security offers these suggestions to employees: don't leave valuables in your car; contact the guard captain (Kearny Mesa, 73595, and Lindbergh Field, 26258) if your car must be left unattended overnight or on the weekend; and participate in the employee lookout program by reporting unusual ac-

tivity observed in the lots to the Emergency Control Center (Kearny Mesa, 73100, and Lindbergh Field, 28244).

Perhaps less publicized are the activities of the investigative team which works with criminal complaints and company and government violations. They are currently working on a case involving several thousand dollars' worth of stolen Company property. After several weeks of investigation and multiple personal interviews, a suspect was identified. Security is in the process of recovering this property from area pawn shops.

Then there was the incident several weekends ago when a dozen unauthorized aliens, who were being pursued by the police, scaled the security fence at Kearny Mesa. Officers spotted the unwelcomed guests, rounded them up and had them out of the facility in less than one hour.

We can be assured that our Security team is working for us.

Plant 19 Update

Two months ago, the San Diego Union published an article that raised questions about the relationship or "arrangement" between Convair and the Government tenants at Air Force Plant 19.

The relationship between Convair and the Navy Public Works Center (PWC) is embodied in a negotiated contract that is fully authorized by the Air Force and Federal Statutes. Convair, in accordance with the contract, provides certain services to the tenants for which they pay a contractually-agreed price. No charge is made to the Government tenants for rent or lease payments.

The three elements of service provided by the contract are: utilities, including gas, electricity and water; guard services; and maintenance, including emergency repair, normal maintenance on Convair or Air

Force equipment (but not Navy-owned equipment). Excluded are janitorial services for which the Navy has its own services.

The tenants, therefore, occupy their portion of Plant 19 free of charge from Convair, and with the concurrence of the Air Force. They have legitimately contracted with Convair to provide the listed services.

Earthquake Awareness

It's time to remind us that although we live in one of America's finest cities, we also live in a city of seismic instability.

Experts forecast an earthquake of catastrophic proportions within the next 30 years, and they say, it could happen right here in San Diego County.

A major earthquake could cut off utilities and telephone lines, hospital and paramedic assistance, transportation, food supplies,

and even aid from community agencies.

Education is essential to prevent unnecessary injury or death. The American Red Cross has published a flyer entitled "27 Things to Help You Survive an Earthquake." Get your copy by sending a request and a self-addressed, stamped envelope to the American Red Cross, 3650 Fifth Avenue, San Diego, CA 92103.

Do you have a new phone number or mail zone? Report any changes to Telecommunications, 73413, to help update their files.

Employment

For the week ending June 5, Convair Division employment was 8,899; Space Systems Division employment was 2,747.

CONVAIR

WEEKLY LOG

June 22, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Remaining the Leader

Space Systems to Build 18 Atlas/Centaur

Space Systems' General Manager Alan Lovelace announced at the Paris Air Show on June 15 that the division will build 18 Atlas/Centaur launch vehicles under a company-funded program representing one of the largest single commercial space commitments in the industry. "Our company has played a key role in the space program since its inception, and we are dedicated to continuing and supporting our country's preeminence in space, both commercially and militarily," Lovelace said during the Paris press conference.

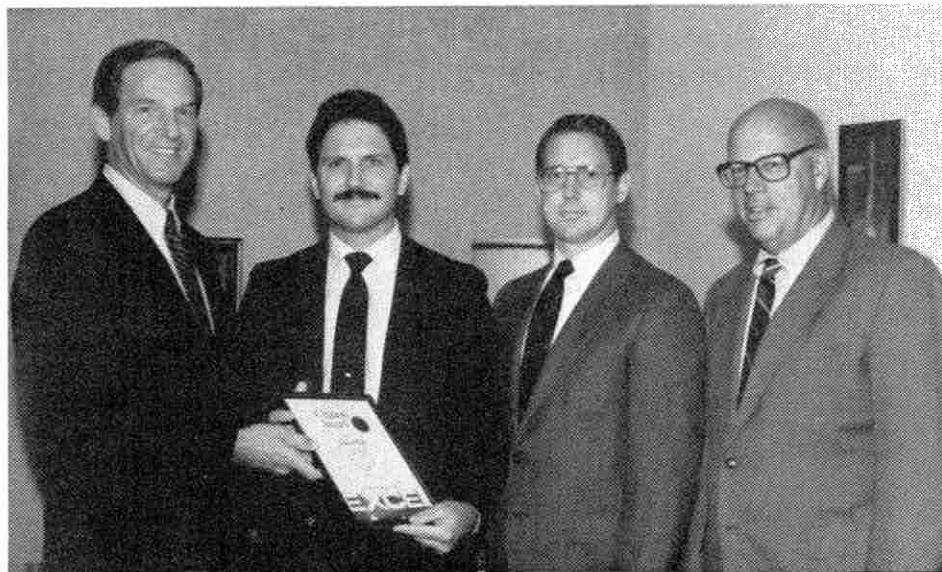
Under the commercial Atlas/Centaur program, customers are able to purchase the vehicles and launch services directly from General Dynamics. Launch openings from Cape Canaveral will be available from 1989 to 1992, and the company's comprehensive launch services package includes a guaranteed reflight, at no additional cost, in the event of a launch vehicle failure.

Lovelace said that volume production of Atlas and Centaur will result in lower costs and enable General Dynamics to offer these launch vehicles to commercial customers at competitive prices. "Additionally, it will directly benefit the country in terms of job creation and will help to alleviate a critical shortfall in U.S. space launch capabilities," he said.

Career Continuation Center

A Career Continuation Center has been established in Mission Valley at 2727 Camino Del Rio South, Suite 337, and is now open to assist Convair salaried employees scheduled for termination and those who have been terminated due to the reduction in force.

The Center hours are 9 a.m. to 6 p.m., Monday through Friday. It provides job postings from several General Dynamics Divisions, and local employers in the greater San Diego and Los Angeles areas. Additionally, a selection of newspapers, technical magazines, and trade publications listing job openings will be made available. Telephone use, resume typing and reproduction, job hunting reference material, job fair schedules, and employment counseling assistance will be made available.



Convair's Richard Ball was selected as Research & Engineering's May Employee of the Month for his outstanding performance as group leader for Parts Engineering. He is developing an on-line parts data base system by working with many groups to create a more efficient Parts Management concept and system that will benefit current and future programs. From left are Ray Beuligmann, Vice President of Research & Engineering, Richard Ball, Dan Cunha - Chief of Tomahawk Reliability & Maintainability, and Walt Becker - Manager of Systems Effectiveness.



The DCASPRO officers are, from left, Capt. Steve Stone, Maj. Dan Thorsen, LCDR Jim Thomson (Retired), Capt. Don Christopher (DCASPRO Commander), LCDR Bob Krupp, Lt. Holly Johnson, and Capt. Jim Delaney.

The Military Presence

A military presence at our facility should come as no surprise. After all, we are a major defense contractor. On a daily basis one can see the uniforms represented from the Navy and Air Force. Since we're involved in multimillion dollar government contracts, the Defense Contract Administration Services Plant Representative Office (DCASPRO) is assigned here to provide

contract administrative services to minimize problems of contract performance, expedite contract actions, and assure compliance with the terms and conditions of contracts.

DCASPRO is currently commanded by Capt. Don Christopher, SC, USN, with a military and civilian staff of nearly 200 personnel. Capt. Christopher's military staff has three Program Support Officers (PSOs)

(Continued on back)

and two Engineers. The PSOs serve as direct representatives of the Commander for programs assigned.

Current officers assigned from the military services include: Maj. Dan Thorsen, USAF - F-16 and Space Division programs, LCDR Bob Krupp, SC, USN - Cruise Missile AUR and B-1B Intermediate Automatic Test Equipment programs and Capt. Steve Stone, USAF - Advanced Cruise Missile and Ground Launched Cruise Missile Unique programs. Two Engineers, Lt. Holly Johnson, USN, and Capt. Jim Delaney, USAF, provide technical expertise on assigned programs.

The Commander and many of the DCASPRO staff are located on the 3rd and 4th floors of Building 1 at Kearny Mesa; however, DCASPRO personnel are located at all primary facilities utilized by General Dynamics.

RAMCAD — Convair Establishes Lead

In September 1985, the DoD-Industry task force on Computer-Aided Logistic Support, CALS, recommended action to improve supportable weapon system design. In a policy memorandum by the Deputy Secretary of Defense, William H. Taft IV, a series of objectives was outlined including the integration of reliability, maintainability and supportability design tools into the computer design and engineering process. This has become known as the RAMCAD initiative for Reliability, Availability and Maintainability In Computer-Aided Design.

Convair's Integrated Logistic Support group has been actively pursuing this objective through IR&D projects since 1983 and has established Convair as a lead in this area. A film made by the division in 1984 under CRAD was used by the Air Force to convince the Office of the Secretary of Defense to provide funding.

In 1987, nine million dollars in contracts have been allocated for RAMCAD with follow-on funding available for future enhancements. Convair was awarded task one of a Program Research & Development Announcement (PRDA) to develop a prototype RAMCAD system worth 2.98 million. Boeing and TRW are associate contractors and will develop an engineering curriculum in RAMCAD and perform long-term research and development in this discipline.

In addition, the government expects to set up an industry and university consortium to pursue RAMCAD objectives. The Convair contract was jointly awarded by the Air Force Human Resources Lab at Wright Patterson AFB, the Army Armament Research Development and Engineering Center (ARDEC), and the Dover Site Computer Integration Engineering Committee.



Dwight Herkness (right) receives an apprenticeship graduation certificate in Tool Design from B.J. Griffin, Group Engineer. Dwight completed 8,000 hours of on-the-job training and has a bachelors degree from the University of Michigan. In addition, Dwight is working on an associates degree in Manufacturing Technology.

Negotiations Information Available in the Review

A special newsletter, the *Review*, is being published to provide all employees within the Convair, Space Systems, and Data Systems-Western Center divisions with information about issues being addressed during current negotiations between the International Association of Machinists and Aerospace Workers (IAM) and General Dynamics. Copies of the *Review* are being made available at the same locations as the *Weekly Log*.

New Space Systems Forms

New Space Systems Hardware/Software Request forms (Form #SSD1068) have been issued and are available in Commercial Stores and from Information Systems Steering Committee members.

These new forms will be used for all Space Systems' DSD and division computer equipment requests, relocations, hardware and software evaluations, equipment loan requests, etc.

The existing DSD Hardware/Software Request (Form #DSD 3-0063) will be accepted until July 13, after which time Form #SSD1068 will be required.

St. Vincent de Paul Volunteers

A special thanks goes to the many employees who responded to the request to volunteer your time and talents to the St. Vincent de Paul Center. The official opening of the new center has been changed from July 22 to September 1, and if you have not completed a questionnaire, please do so and send it to the *Weekly Log*, MZ 11-1330.

May Retirees

Thanks and best wishes for a happy retirement to these employees who retired in May:

Name (Classification)	Years of Service
Edward W. Aubuchon Configuration Mgmt Spec.....	8
Virgel J. Burr A/C Assembler.....	16
Robert R. Cass Inspector-Launch Service	28
John Cordova Software Engineer.....	30
Lois S. DeSoto Eng. Release Data Recorder.....	35
Ernest J. Dresser Inspector-Launch Service	15
Judy M. Drury Engineering Admin. Asst.	26
Richard L. Evans, Sr. Engineer Sr.	13
Robert F. Gilligan Logistics Specialist	3
John C. Lievens Engineering Specialist	36
Jack H. Love Engineering Mgmt. Servc.....	30
Billy B. McClure Launch Service Mechanic	31
Rita M. Mortensen Executive Secretary	4
Jay Mumford Human Resources Specialist.....	31
Bonnie L. Robbins Secretary	28
Charley L. Ross Tool & Operations Planner.....	36
Joseph Saugier Engineer Sr.	30
James J. Zawadzki Comp Systems Analyst	13

Travel Services Moving

Travel Services is moving today, June 22, from Century Park, Building 3 to Century Park, Building 5, Suite 120. Their phone number remains the same, ext. 77660.

Employment

For the week ending June 12, Convair Division employment was 8,893; Space Systems Division employment was 2,751.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330. Managing Editor: Cal Samuels Production Editor: Bob Trometter Design/Layout: Bill Ferebee Compositor: Dianna Rich

CONVAIR

WEEKLY LOG

June 29, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

The Tradition Continues

Atlas 59E Launches from Vandenberg



Atlas 59E successfully launched the Air Force Defense Meteorological Satellite Program (DMSP)-9 spacecraft into a 458-nautical-mile, sun-synchronous orbit on June 19. At 7:34 p.m., 59E lifted from the pad of Space Launch Complex (SLC)-3 West at Vandenberg Air Force Base, carrying the third of nine DMSP spacecraft to be launched on an Atlas E vehicle.

The RCA-built spacecraft was the first of its kind to be equipped with a microwave imagery sensor that provides data on ocean surface winds, cloud water content, soil moisture, and ice coverage at parts of the globe. Identifying severe weather conditions is one of the satellite's functions to assist military commands with such operations as photomapping and aerial refueling. According to an RCA representative, the spacecraft is in its designed orbit and is functioning well.

Atlas 59E was originally manufactured by Convair as an operational weapons system and delivered to the Air Force in Au-

The following is an excerpt from the Convair Division notice issued to supervisors by Acting General Manager Mike Keel.

1. *The recently completed Midyear Salary Review indicates that you did a very good job in rewarding performance and ranking, while recognizing the limitation of our compensation dollars.*
2. *You are aware of many of the cost containment actions that we have undertaken recently. The salary review here at Convair brought some additional concerns that I would like to share with you for discussion with your employees.*
 - a. *Our customer has advised that per capita payroll costs cannot rise above the current Data Resources Incorporated (DRI) inflation projection. Further, as you know, we have a strong desire to regain our competitive edge.*
 - b. *Use of our historic approach to the distribution of our compensation funds requiring that, in general, employees ranked and rated higher, on the whole, receive larger increases than lower ranked and rated employees — coupled with a minimum percentage increase — would have led to passes for 55 to 60 percent of our employees.*
 - c. *Top management did not want to be placed in a position to be unable to recognize, in a financial sense, the valuable contributions made by such a large segment of our population.*
 - d. *The solution: Modify the compensation approach and introduce the "lump sum" approach, which has been enjoying increased popularity with major firms over the last four years with positive results on labor rate containment while rewarding performance. Set no pass ratio and set only one restriction — increases have to be in \$100 increments.*
 - e. *Results: Using a combined merit/lump sum increase approach, more salaried employees will get financial recognition of their contributions than last year.*

gust 1961. After serving in operational status and storage through 1984, the vehicle was modified, refurbished, and delivered to the Air Force Space Division in December 1985 as a space launch vehicle assigned to launch DMSP-9.

59E continues the tradition of Atlas reliability and dependability. Congratulations to the Atlas team for the sixteenth consecutive successful launch of an Atlas from Vandenberg.

Beasley Awarded Gold Knight of Management

At the annual Florida Space Coast Council Manager of the Year banquet, Space Systems' Bob Beasley received the National Management Association's Gold Knight of Management Award. Beasley, chief of Site Support at the Eastern Space & Missile Center, received the association's prestigious award for outstanding leadership and management skills, community service, support of the American enterprise system, and support of the National Management Association and its code of ethics.

Congratulations, Bob, and thanks for being a fine example of leadership.



Space Systems' design engineer and Florida National Director of the NMA, Jeff Hartnett (left), presents Bob Beasley with the coveted Gold Knight of Management Award.

Time Card Reminder

Employees are reminded that all hours worked must be recorded on your time cards.



The Extraordinary Achievement Award winners are congratulated by Research & Engineering management.

IRADs Rate a Perfect 10

Each year, the U.S. Department of Defense evaluates the performance of companies participating in the Independent Research & Development (IRAD) program. The three IRAD Technical Plans completed by Convair's Research & Engineering members received a perfect grade of 10.0. The

plans describe the objectives of the research and progress during 1986. Extraordinary Achievement Awards were presented to these people for their efforts on this project: Gary Herbella, Nghia Lam, Bruce McArthur, Bruce Nicholson, Mike Patrick, Andy Pruitt, Earl Starr, Riho Terras, and Jon Wang.



1987 Scholarship winners pose with NMACC President Aaron Banks (far left) and Reuben Fleet, Jr. (center), of the Fleet Foundation.

NMA Scholarship Award Winners Recognized

Twenty-one daughters and sons of General Dynamics employees were awarded scholarships at the June 18 National Management Association Convair Chapter meeting. The \$1,000 scholarships were made possible by scholarship fund donations throughout the year and by a grant from the Reuben H. Fleet Foundation. The scholarship recipients were:

Laura Autio, daughter of Pete & Frances Autio

Alexander Campbell, son of Ruth Titus
Catherine Dunavant, daughter of Kenneth & Patricia Skala

Jeremy Goldman, son of Eric & Harriet Goldman

Diane Eberle, daughter of Gerald & Susan Eberle

Kristin Huddleston, daughter of Richard & Donna Huddleston

Offset Vacation Program

Tour the Orient

Picture yourself visiting such exotic cities as Hong Kong, Bangkok, Singapore, and Tokyo. Throughout 1987, you can take a seven-day shopping tour of Hong Kong that includes air transportation from San Diego on Korean Air Lines and five nights' lodging for \$865 per person, less a \$50 per person discount for a low \$815. Many options are available for extending your tour to Bangkok, Seoul, Singapore, Taiwan, or other destinations in the Orient.

Lori Campbell, Space Systems' National Management Association Travel director, is organizing an Offset Vacation tour to Hong Kong and the Orient for the 1987-88 Christmas/New Year's holiday. Any General Dynamics employee, retiree, vendor, or friend is welcome. Watch for more information on this exciting opportunity.

Brochures and information about these tours and other independent travel packages are available through General Dynamics Travel Services. Ask for Norma at 78327.

Susan James, daughter of Marvin & Margaret James

Elizabeth Jovanovic, daughter of Ratko & Kosara Jovanovic

Michael Keays, son of Wendall & Anita Keays

Bryan King, son of William King & Mary Johnson

Valerie Leek, daughter of Terry Leek

David Marsden, son of Phillip & Martha Marsden

Rene Phillips, daughter of Walter & Diana Phillips

Sharon Powell, daughter of Hal & Linda Powell

Kenneth Purdy, son of Fred & Anna Purdy

Kimberly Robertson, daughter of Darrell & Jean Robertson

Maureen Sammon, daughter of Thomas & Beverly Sammon

James Shew, son of James & Elizabeth Shew

Mark Shih, son of Peter & Loretta Shih

Felicia Todd, daughter of Frederick & Lucendia Todd

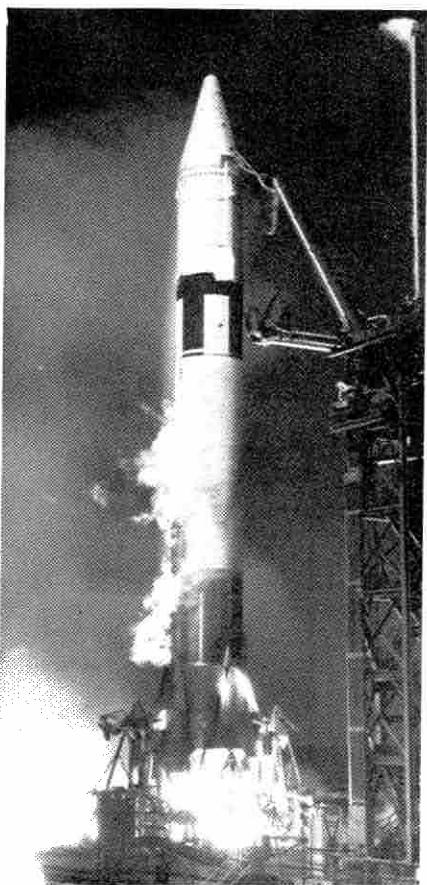
Laura Toller, daughter of Jerome & Colleen Toller



Atlas & Centaur

25th/30th Anniversaries

Space Systems Celebrates Atlas and Centaur



Atlas 104-D lifts off the pad with the first Centaur, F-1, on May 8, 1962.

On June 11, 1987, more than 325 people gathered in Hangar J at Cape Canaveral to commemorate the 30th anniversary of the first Atlas launch (A-4, June 11, 1957) and 25th anniversary of the first Centaur launch (F-1, May 8, 1962). The attendees were current employees, retirees, and former employees who participated in either, or both, of these monumental missions.

Providing the ceremony's introductory address, Space Systems Base Manager Dan Sarokon stated that the "true value of success in any system is measured by the length of its endurance. Atlas and Centaur have endured," Sarokon said, "because there was a need for these vehicles, the hardware was fine, and we were served and surrounded by dedicated people. The very same need for Atlas and Centaur still prevails today."

Lieutenant General Forrest McCartney, USAF, Director of Kennedy Space Center, was on hand as the keynote speaker. "When the world looks at the United States," Mc-

Cartney said, "they think of two things: freedom and our space programs."

McCartney recalled the early Atlas launches and the important role that Atlas and Centaur have played over the years. "The country has for 30 years enjoyed the first-class Atlas and the first-class team. The Centaur has also been the backbone of our space programs. Atlas and Centaur for several decades have been the mainstay in keeping our country free and bringing worldwide recognition," he said.

"This ceremony is most appropriate, and it is a pleasure for me to be a participant," McCartney said. "No hardware is any better than the team that builds and launches it. We're not here today to bury the Atlas and Centaur. Their future looks bright."

Air Force Lieutenant Colonel Wayne Penley, Commander — Cape Canaveral Air Force Station, was also present. "In 1961 I was put on an Atlas team," Penley said. "I discovered for a system to be reliable, it takes a lot of good people, and those of you here today are that team. I'm looking forward to the Air Force's supporting Atlas/Centaur here at Cape Canaveral."

Another guest, Jim Womack — NASA Acting Director of Expendable Vehicles, added, "Atlas and Centaur have certainly made a name for themselves over the past 30 years. This country needs an asset like Atlas/Centaur. I hope NASA will be your very best customer."

John Harrison, who was test conductor for Atlas 4-A, was unable to attend the ceremony. In a letter to Dan Sarokon, Harrison wrote: "...There were many dedicated people working long hours to meet the ambitious milestones of the program. All of this effort came to a focal point at the launch of Atlas 4-A.

"Although Atlas 4-A did not achieve all of its objectives, it served as a great first step in the development program. It proved the launch complex, which had numerous innovations. Everything worked well. It also proved many of the missile systems during its limited flight, but perhaps most of all, it silenced those who had been so critical of the missile's stainless steel tank structure."

Ernie Baldini, the test conductor for Centaur F-1, summarized the feelings of those present at the 25th/30th anniversaries. "What I remember most about Atlas and Centaur is rubbing shoulders with people who made history."

The following letter from B.G. MacNabb, the first base manager, was read at the 25th/30th anniversary ceremony.

June 11th, 1957, is still a vivid memory to me. I was still a green, inexperienced base manager with a green, inexperienced team of engineers, technicians, mechanics and inspectors. The only thing in my favor was that whatever we lacked in experience we made up for in dedication.

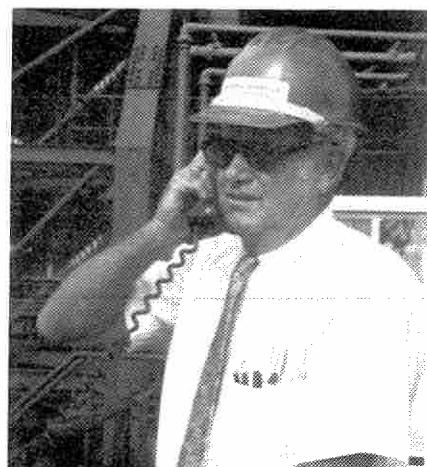
At the end of that day, we all felt a sense of failure; but the next day the entire team was back at the task and only wanting to know when we could try again.

To those of you who were there thirty years ago, and to all the dedicated people who have come since, I wish to extend my thanks and my gratitude for your having made my career a success and having given me the memories of all the later successes we had.

It is also appropriate for you to celebrate the launching of the first Centaur, which pioneered the use of liquid hydrogen in the space program when Danny Sarokon was just a mere lad.

My thanks to all of you who have made the name of General Dynamics the standard of excellence in the Space Age.

B.G. MacNabb, Base Manager No. 1



Jack Dean recalls the early days of Atlas.

Insights into the Past

Jack Dean, Launch Operations group supervisor, started at the Cape in February 1958. At the launch of Centaur F-1, he was a missile mechanic monitoring TV cameras placed in the hydrogen tank.

"In the early days, just clearing the pad

6/29/87

was considered a great success," Dean said. "We could then evaluate the problems and take corrective action. We were in the developmental stage, and launching rockets like ours was something that hadn't been done before.

"I still get excited at a launch, even after all these years. It's like the feeling you get when the American flag passes by in a parade."

Buckets Milligan was a young engineer in the early Atlas days. "I was single at the time," Milligan recalled, "and I had finally mustered up enough nerve to ask out a young lady who worked in the blockhouse.

That same day, some of the guys found out about it, and all of a sudden there was this announcement over the loudspeaker for the entire blockhouse: 'Buckets Milligan, your wife just called and wants you to bring home some milk for the kids.' "

On a more serious note, Milligan said that the entire Atlas team had to improvise during those days. "We were just starting the nation's space program, and there weren't written procedures for every operation. We learned as we worked, but we were dedicated, and we all worked with precision and pride."

The U.S. government renewed its interest in the rocket project in 1951. In 1954, the Air Force gave Convair the go-ahead to produce the Atlas as an intercontinental ballistic missile (ICBM) system. Three years later, the first Atlas flight vehicle, 4-A, was sent to Launch Pad 14 at the Air Force Missile Test Center at Cape Canaveral. Although the June 11, 1957, flight of 4-A ended in an explosion after 45 seconds from liftoff, the test verified the credibility of the launcher, the airframe, and the engines.

Atlas 6-A followed in similar fashion on September 25, and on December 17, 1957, Atlas 12-A successfully flew as the world's first ICBM. The Space Age was ushered in.

Following the last of the A series birds (16-A), the B series incorporated sustainer and vernier engines. Project Score launched an entire Atlas (10-B) into earth orbit on December 18, 1958, that carried a recorded Christmas message from President Eisenhower, which was broadcast to the world. The C series followed with further improvements in 1959.

Atlas' D series, scheduled to become the operational ICBM, began operational life with the launch of Atlas 3-D on April 14, 1959. Atlas 12-D was the first launch from Vandenberg Air Force Base, on September 9, 1959.

NASA selected the D series for the Mercury orbital missions, starting with John Glenn's heroic flight of Friendship 7 on February 20, 1962. Glenn's Atlas 109-D booster was followed by consecutively successful orbital flights of Scott Carpenter, Wally Schirra, and Gordon Cooper.

The tradition continues. As a weapons system, Atlas was phased out in 1965, but it has remained active in launching a variety of payloads spanning 491 missions.

Atlas was America's Sunday Punch as an ICBM, and it continues to be a major contributor to the future of the free world's space programs.

Go, Atlas!



George Page (left), former General Dynamics employee and former Deputy Director of the Kennedy Space Center, signs a resolution charging current and future generations to carry on the Atlas and Centaur traditions.

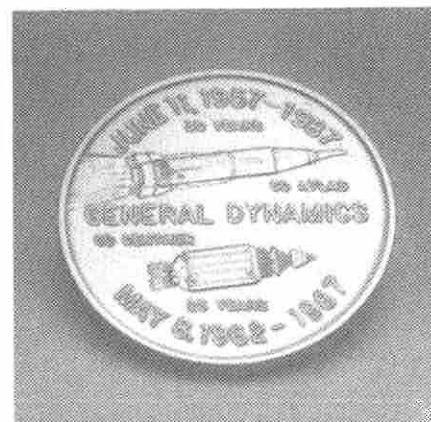


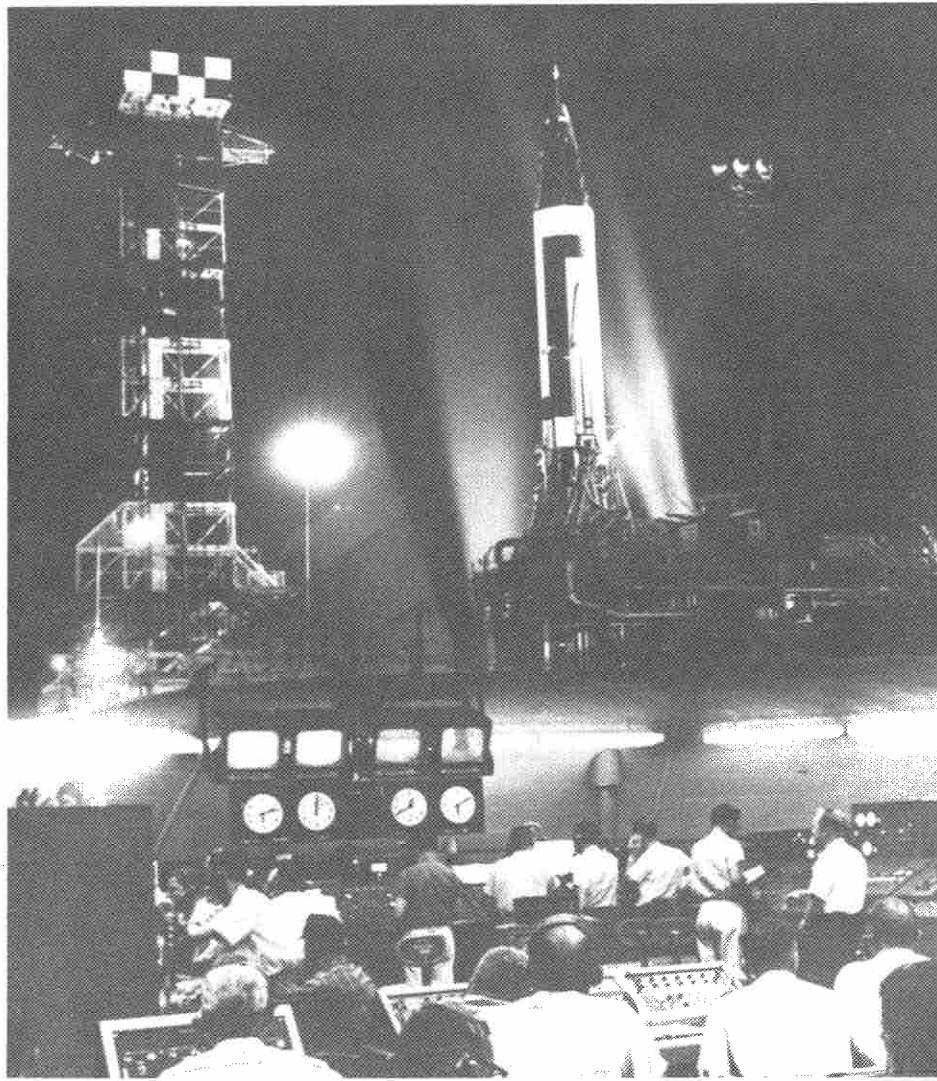
Lieutenant General Forrest McCartney addresses the audience during the anniversary ceremony.

Atlas: America's Sunday Punch

In 1948, the Berlin blockade began; Truman defeated Dewey; New York's Idlewild Airport was dedicated; and the term Cold War was introduced in a speech by Bernard Baruch. The Space Age was dawning when Consolidated Vultee's Karel Bossart headed up the secret Project MX-774, the forerunner of Atlas.

The first test of the MX-774 Hiroc vehicle, on July 13, 1948, at White Sands, New Mexico, was to test the concepts of swiveling engines and a pressurized balloon-tank structure. The test failed, as did two others that followed. The project ended in 1948 due to lack of funds, but the seeds of success had been planted because the design concepts had passed through critical control, aerodynamics, and pressure tests.





The countdown begins for Atlas 4-A on June 11, 1957.

New Missions and a New Partner

While the Atlas program was in its infancy, Kraft Ehrick's concept of mating a liquid-hydrogen-fueled upper stage to the main booster was proposed to the government by Convair in 1957. As a result of this proposal, Convair was teamed with Pratt & Whitney, which was already developing the RL-10 engines, and the Centaur was born.

The first Centaur, F-1, was delivered in late 1961, and was mated with Atlas 104-D on Complex 36 at the Cape. After extensive testing, F-1 was launched on May 8, 1962. The mission failed when the vehicle exploded, but important data was gathered, and the engineers returned to the drawing board.

The second attempt at launching a Centaur was a success. A/C-2 flew on November 27, 1963, and proved that the liquid-hydrogen engines would work and that the vehicle was a valid system.

For the next few years, successes were mixed with failures, but the bugs were be-

ing worked out and Centaur was on its way to becoming the backbone of American space exploration and application.

Centaur, either combined with the versatile Atlas or the Titan booster, has logged 74 missions — 67 atop Atlas and seven on Titan — in support of the highly successful Helios, Viking, and Voyager planetary probes. Nearly every unmanned lunar and planetary mission — including Pioneer, Ranger, Mariner, Lunar Orbiter, and Surveyor — was launched into space by Atlas and Centaur.

A number of communications satellites have been successfully flown on Atlas/Centaur, including the Intelsat and Comstar series, and Fltsatcom spacecraft for the Department of Defense.

Although the Shuttle/Centaur program was canceled in 1986, Centaur remains the nation's premier upper stage. Its future is bright, and it's ready and available to continue supporting commercial and government spacecraft missions.

Go, Centaur!

Participants in the anniversary ceremony signed the following resolution.

Resolution

Resolved on June 11, 1987, at the Ceremony Commemorating the 30th Anniversary of the First Atlas Launch and the 25th Anniversary of the First Centaur Launch:

The undersigned have contributed most of our working lives to the furtherance of the space programs of the United States of America. We are fortunate to have participated in the pioneering, development, and evolution of the free world's space technology. We have helped conduct a significant portion of all space launches achieved by our nation, including the launch of all U.S. deep space missions. Some of us have retired; many of us continue to work in support of our nation's space programs.

Each of us hereby challenges and charges our successors: You must develop and maintain the high degree of dedication, perseverance, craftsmanship, professionalism, inquisitiveness, and determination necessary to properly carry out your responsibilities in the same manner that we disciplined and sacrificed ourselves during our careers. You must build your standards of excellence on the foundations of our heritage developed through the trials and tribulations of our successes and failures. It is our hope that your successful efforts actuate, accentuate, and illuminate America's future space commitments.

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PC Software Duplication Policy

In a recent *Weekly Log*, Convair employees were informed of a policy statement which must be signed when software is issued. This is the statement:

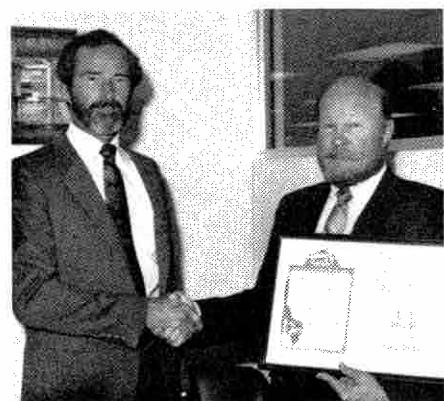
Personal Computer Software Duplication Policy and Guidelines

1. Convair Division policy prohibits unauthorized reproduction of software. Generally, one backup copy of the software is authorized.
2. Convair Division licenses the use of its computer software from outside companies. Convair purchases the right to use the software and its related documentation (and in doing so it becomes company-licensed software). Unless authorized by the software developer, the employee does not have the right to reproduce it.
3. Only company-licensed software may be used on Convair personal computers. Employees may not use personally owned software on company premises

because of potential software copyright and/or security violations.

4. Special licensing agreements are required on software for use on local area networks or on multiple machines. Convair Division employees shall use the software only in accordance with those special licensing agreements.
5. Convair employees learning of any misuse of personal computer software or related documentation within the company shall notify the Convair Ethics Program Director.
6. Convair employees making, acquiring, or using unauthorized copies of personal computer software will be subjected to appropriate disciplinary action.
7. According to the U.S. Copyright Law, illegal reproduction of software can be subject to civil damages of \$50,000 or more, and criminal penalties including fines and imprisonment.

If you have questions on the above policies, please call Susan Malone at 68617.



Ed Beveridge, engineering manager, congratulates Stan Battle on his first patented invention.

Innovative Ideas Pay Off

The U.S. Patent Office recently granted patent number 4,635,552 to Convair's Stan Battle of Cruise Missile Avionics (628-0). The invention is a unique signal, safe-and-arm device that drives rocket motor ignition. Battle's device prevents the inadvertent detonation of ordnance requiring extremely controllable ignition even during severe physical conditions.

The device can also return to its initial safe state at any time during arming. The safe-and-arm device is economically producible, using conventional components that allow mass production.

Tool Awareness Program

The Tool Awareness Program (TAP) is on the move. Each factory organization has assigned coordinators, posters are up, and tools are coming in. Before long, status boards will be up throughout the factory so that you will know what progress you are making.

To date, we have identified \$140,000 in idle and obsolete tools. This represents 23% of the Convair and Space Systems goal.

Tools are also being repaired and reissued to various tool cribs throughout the divisions for your use. This recycling of tools is a prime example of the purpose of the TAP program to locate idle or seldom-used tools and redistribute them to areas of need, thus eliminating excessive inventory by not requiring additional purchase of tools.

Thanks for your participation so far, and we ask for your continued efforts to locate idle and worn tools and get them turned in. It is through your participation that we will be able to provide you quality tools, made available where and when you need them.

Employment

For the week ending June 19, Convair Division employment was 8,875; Space Systems Division employment was 2,766.

Congratulations, Graduates!

These Convair and Space Systems employees have demonstrated their commitment to excellence by spending many of their evenings and weekend hours attending college classes. We congratulate them for earning their degrees.

Name & Department

Name & Department	Degree and School
Jose Bello (002)	Associate of Science, Mesa College
Steve Dominguez (260)	MS, Logistics, National University
Roger Espineli (618)	Associate of Science, Mesa College
Andrea Filan (602)	MS, Mechanical Engineering, SDSU
Nghia Lam (659)	MS, Electrical Engineering, SDSU
Dean Liensdorf (604)	Associate of Science, Grossmont College
Russ Owens (196)	BS, Mechanical Engineering, SDSU
Susan Sedillo (870)	MBA, National University
Carter Smith (031)	BBA, National University
Karen Tilden (621)	MS, Applied Physics, UCSD
Al Wadsworth (262)	MS, Logistics, National University
Marcia Weitala (850)	BA, Management, University of Redlands

Rule 1 — Quality Improvements

Twenty-five fully acceptable missiles in a row. That's the record as of June for the Tomahawk Sycamore Canyon Facility in a special inspection designed to ensure customer acceptability of ground and sea-launched cruise missiles. This special inspection, called Rule 1, was initiated to preclude any problems by the Air Force or Navy when installing payloads in ground and sea-launched cruise missiles. To ensure that all system elements continue to operate correctly, this inspection simulates installa-

tion operations by using the identical procedures, tools, and support equipment used by the customer.

Since originally started in January 1984, Rule 1 operations surfaced the need to improve support equipment, clarify technical manuals, make small but significant missile design and manufacturing changes, and to require additional technician training and skills to ensure right-the-first-time manufacturing and inspection. The results of these improvements have given us the current record — 25 in a row.

Congratulations to the Tomahawk team for this achievement.

CONVAIR

WEEKLY LOG

July 6, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



The Systematics are (clockwise from top center) Mike Hoerster, Terry Bohlen, Larry Chan, Ray Peterson, Mike Keyack, Bob Jones, Brian Niznik, Tad Winiecki, Ted Fandel, Carl Mair, Charlie Combs, and D.K. Lynn.

Systematics Circle The Issues

For years now, Quality Circles have been improving quality and productivity, reducing costs, and eliminating unnecessary roadblocks in day-to-day operations. Meeting for one hour each week, Quality Circles comprise several members of a given department who gather to identify and resolve work-related issues hampering job efficiency.

The "Systematics" recently became Space Systems' first Quality Circle to receive recognition pins for successfully completing a project resulting from their efforts. To date, the Systematics have developed a generic Systems Engineering Management Plan (often a contractual requirement), and a Personnel Expertise and Experience Retrieval System to preclude redundancy in developing skills which a colleague already possesses.

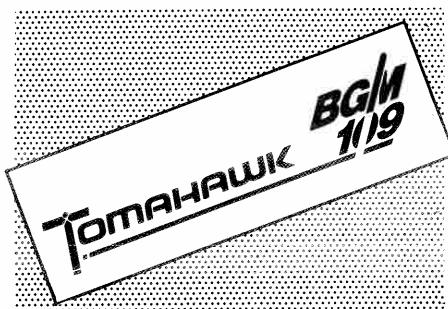
Congratulations, Systematics.

Banner Month for Deliveries

During the month of June, Convair delivered 27 production Tomahawk Cruise Missiles to the customer, exceeding the contracted delivery schedule of 21. The Tomahawk team also delivered 16 maintenance vehicles during the month.

Five units of Ground Launch Cruise Missile (GLCM) Unique hardware were forecast for June. Three Transporter Erector Launchers (TELs) and two Launch Control Centers (LCCs) were DD250 processed — all on, or ahead of delivery schedule. These deliveries maintain the cumulative GLCM

Unique hardware deliveries on schedule. Congratulations to the Tomahawk team for a superb month of production.



Convair Employee Survey Update

The Employee Survey Communications Committee has identified four major areas — communications, facilities, employee recognition and training and development — that are rather universal concerns within the Convair Division. Each of these areas will be addressed in future issues of the *Weekly Log*.

The Committee has instituted several activities within their respective departments to keep you informed on the issues revealed in the survey.

Here is a partial listing of the activities being conducted in the various departments:

- Establishing Employee Survey Information Centers
- Special editions of departmental newsletters
- Group meetings within the work groups
- Notifying employees when suggestions have been implemented
- Establishing time schedules for accomplishing objectives

Members of the Employee Survey Communications Committee are:

Research & Engineering — Carole Black, 73773

Finance — Andy Frank, 75335

Program Development — Bud Smith, 74934

Operations — Fran Richardson, 26372

Quality Assurance — Paul Grant, 75772

Human Resources — Joanne Kowalik, 39528

ILS — Barbara McDonald, 78434

Advanced Programs — Gary Kornmayer, 26650

Contracts & Estimating — Fran Cannon, 75866

Planning & Facilities — Chuck Curriden, 39678

Aircraft Programs — John Newman, 28550

Hypersonic Technology — Marsha Nolan, 38274

Plant 19 Update

Articles published in the *San Diego Evening Tribune* regarding Convair operation of Plant 19, a government-owned, contractor-operated facility, have recounted the recently released report of the Department of Defense Inspector General (IG). This report was based upon a three-month investigation of Convair's contractual relationships with the Air Force and Navy at Plant 19.

The IG's report centered on three major issues: maintenance erroneously performed by the Navy, the costs of services charged to the Navy, and the commercial rental of space by Convair at Plant 19.

Maintenance

Originally, the focus of the investigation was to be on maintenance performed by the Navy Public Works Center (NPWC) that Convair was contractually obligated to do. The inquiry revealed that, although the tasks in question would have been performed by Convair had it known, the tenants at Plant 19 failed to follow proper procedure by notifying Convair that the work was required before asking that NPWC perform the tasks. Although no fault was attributed by the IG to Convair for the discrepancies, Convair offered to refund the material costs that Convair would have expended had they been properly notified of the necessity of performing the maintenance tasks.

Occupancy costs

An earlier article (March 22, 1987, *San Diego Union*) alleged that Convair, although having rent-free use of Plant 19, charged the tenants to occupy portions of the facility. This misstatement of facts was also investigated by the IG and resulted in the finding that the "arrangement" was legal and in accordance with government regulations and the Air Force facilities contract. Convair properly charged tenants for services since the occupancy contract provides utilities, maintenance, and guard services to the Navy at a negotiated price.

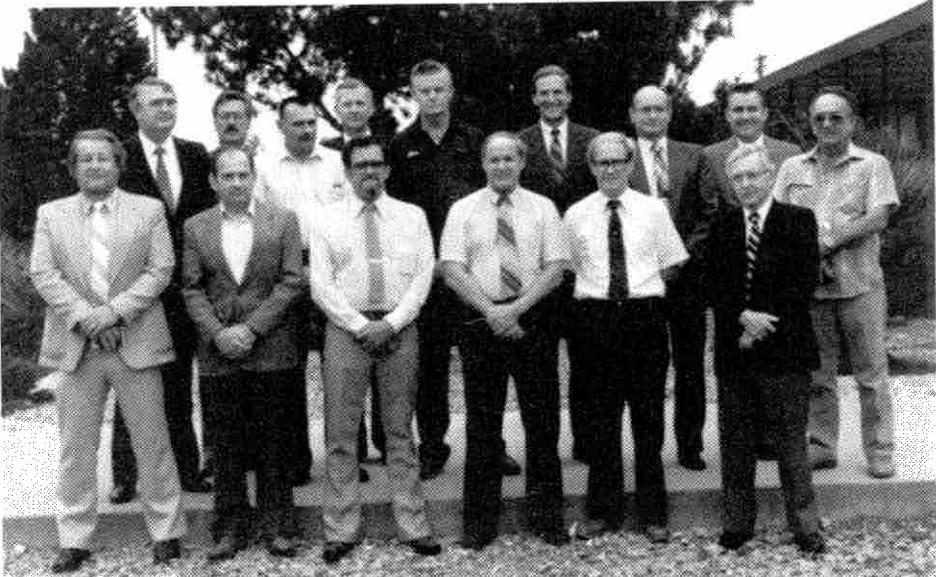
Commercial rental

Finally, the report addressed the issue of the amount of rent Convair pays for occupying space at Plant 19 for commercial purposes. The IG report claims that the amount paid for rent has been too low in comparison to other commercial rentals. However, all previous rental rates have been negotiated with and agreed to by the government, and are in accord with government regulations and the facilities contract. Since no comparable facility exists in the San Diego area, our rental value cannot be evaluated based on comparison.

The bottom line of the IG's investigation was summarized in the report — "Based on our review, there are no significant problems concerning these issues."

Employment

For the week ending June 26, Convair Division employment was 8,847; Space Systems Division employment was 2,781.



At a recent Service Awards Breakfast Convair employees were recognized for 35 years of dedicated service at General Dynamics. Front row: Larry Kelly, Bruce Fuller, John Pinson, Ray Thompson, Bud Heath, Harold Wilson. Second row: Leon Thomas, Rich Corbin, staff, Marv Schrock, Ed Squires, staff, Dale Wilson, Ray Beuligmann, staff, Norm Tipton, staff, George Roos, staff, Ed Brannon.



As June Employee of the Month, Jorge Sepulveda represents Convair's Research & Engineering Department for his outstanding effort and performance in leading engineering tasks to successful completion on Engineering Change Proposal Number 426. The tasks required the repackaging of nine flight test missile configurations over a 21-month period. From left are Ray Beuligmann — division vice president of Research & Engineering, Jorge Sepulveda, Jeff Fell — chief of Tomahawk Avionics, and Ed Beveridge — manager of Cruise Missile Avionics.

WalkAmerica/TeamWalk Results Are In

As the County's largest private employer, General Dynamics plays an important role in the economy of our community. But beyond the financial impact, our employees are active as volunteers and supporters of multiple nonprofit agencies and services.

The recently held March of Dimes' WalkAmerica/TeamWalk fund-raiser demonstrated our community involvement. Seventy-three Convair and Space Systems participants raised nearly \$8,500 for the prevention of birth defects, making us the fifth top team in San Diego County. Over

100 teams participated in the event.

In addition to the walkers, the National Management Association Convair Chapter sponsored a checkpoint to provide refreshments and stamp the walkers' distance cards.

The *Weekly Log* salutes the volunteers who assisted in this worthwhile community event.

New Reproduction Satellite Center at CP

Beginning July 6, Centaur Park will be serviced by a Graphic Reproduction Satellite Center located in Building 1, first floor, West end. All unclassified large volumes may be reproduced at this center.

CRA Wins Honors

The Convair Recreation Association (CRA) recently brought home top honors at the 46th Annual Conference of the National Employee Services and Recreation Association (NESRA) held in Minneapolis.

The NESRA awards are presented annually to corporations that demonstrate outstanding member leadership and achievement in areas of employee services, recreational administration, programming, and special events. CRA's Health Fitness Center was selected for providing the nation's finest brochure in the category of Best Program Handbook, Membership Brochure, and Activities Guidebook.

Published in February 1987, the award-winning brochure provides a comprehensive overview of CRA's excellent facilities and programs provided to General Dynamics' employees and families in San Diego.

CONVAIR

WEEKLY LOG

SPACE SYSTEMS

July 13, 1987

Published by General Dynamics Convair & Space Systems Divisions

Titan/Centaur Mockup Team Continues to Set the Pace



The Titan/Centaur mockup team recently achieved major milestones, including installation of all helium and hydrazene bottles and associated tubing as mockup of the aft bulkhead systems nears completion.

For the past ten months, a dedicated group of design engineers, manufacturing engineers, factory mockup mechanics, and other production support personnel have been dedicated to building the Titan/Centaur mockup. The mockup is a high-fidelity representation of major structural and avionics/electrical systems and assemblies that make up the Titan/Centaur vehicle. The mockup team has done an outstanding job supporting critical program milestones.

Use of mockups has been, and will continue to be, a very integral part of our way of doing business. As in other programs, the Titan/Centaur mockup is being used for proofing of design concepts, human factors/maintainability, and creation of production samples and tooling families primarily for the pneumatic, hydraulic, reaction control, and propulsion systems. Milestones in these areas must be met to ensure that design supports the program schedule.

Congratulations to the Titan/Centaur mockup team for a job well done.

Operations Recognizes Employees of the Month



During the July 7 Operations Employee of the Month breakfast, Ken Lake, Convair vice president of Operations, and his staff recognized and thanked the department's people who had been selected for superior performance during the second quarter of 1987.

"The success of Operations and our division relies upon communications and teamwork," Lake said, "and often we don't take the time out of our day-to-day busy sched-

ules to recognize the contributions of individuals like yourselves who make our success possible. That's what these quarterly breakfasts are all about. They take time, but it's important to say thank you for the fine contributions that you make."

Guest speaker George Roos, division vice president of Human Resources, addressed the key issues that were expressed during the Convair Employee Survey feedback sessions. He explained what the issues

were, what actions were being taken to resolve them, and what the schedules were for implementing these actions. Some of the issues Roos talked about were communications, training, compensation policies, working conditions, and public relations.

After each staff member introduced his Employees of the Month, Lake shared how Operations was responding to the issues which Roos had addressed. "The survey feedback results have the attention and backing of management up to the level of General Dynamics' Chairman Stanley Pace," Lake said. "But it's not simply a management issue — it's a 'we' issue. Your suggestions and feedback are important to the overall success of our operation."

Congratulations to the Operations Employees of the Month:

Manufacturing Engineering

Director — Jim Annis

David Hallas

Ray Richards

Gary Banks

Vicki Daly

Rick Noel

Procurement

Division VP — Russ Babcock

Ralph Venegas

Sally Tessin

Mark Harbison

Continued on back

Advanced Programs

Mfg Product Line

Director – Dave Cormany

Michael Rhamy

Bart Webb

Ruben Herrera

Norman Beachel

Aircraft Programs Mfg Product Line

Director – Lou Imbimbo

Hilda Imthurn

Irene Aarseth

John Thompson

Manufacturing/Material Control

& Scheduling

Director – Don Hannabarger

Troy Devin

Alma Zaragoza

Mary Beth Yusunas

Shannon Shuffler

Fab & Production Engineering

Director – Norm Peal

Mark Weiler

Ernie Gaugler

Bob McClinton

Paul Bao

CM Mfg Product Line

Division VP – Ed Squires

Randy Pierce

Greg Gillespie

Mary Hanes

Ops Administration

Director – Joe Stelmah

Bruce Baugh

Mark Morel

Bill Bourbonnais

Plant Services

Director – Bill Wise

Chuck Johnson

Steve Bowman

Del Ciufi

Roy Ellis

Convair Employee Survey Update

In a recent meeting with Chairman Stanley Pace and his staff, all General Dynamics' Division General Managers presented their key issues and action plans resulting from the Employee Survey and feedback sessions.

Convair has identified ten overall priority areas to be addressed. In response to Acting General Manager Mike Keel's commitment to keep you informed, an upcoming special edition of the *Weekly Log* is being prepared to communicate the feedback summaries and action plans on these issues.

The issues to be published in the special edition are:

Bureaucracy

Communications

Interdepartmental Cooperation

Management Skills

Training

The following editorial by Teri Pisciotta (264-0) appeared in the June 1987 Managair.

We at General Dynamics, especially Convair, are going through a very tough time. Each day we come to work wondering if there will be any work. Within my department, too many people are speculating doom for the future. But too few are looking at the problem objectively.

Some people spend their days complaining that so and so caused this mess. We blame the union, the government, our management, Stan Pace, Ollie Boileau, our coworkers, our customers, each other, and probably the weather announcer if we could get away with it. Why are we sitting on our tushes pointing fingers when we can stand on our feet and help correct the situation?

The prevailing negative attitude within this division is tiring. Each and everyone of us is responsible for his or her own activities. Our activities contribute to our division's success or failure.

Take a minute and think about how we add to Convair's cost. How many of us have requested reports that we may not need? How many times have we "milked" a job because we didn't want to assume more responsibility? Have we made an effort to become more efficient and effective in our jobs without being tasked to do so? Do we assist our coworkers without being asked? Are we at all diversified so that we can contribute in other areas when needed?

Each of us knows where we stand on these questions. We have no right to complain until we have done everything possible to reduce our cost to the company. What, or who, is "the company" anyway? The company is you and me. We make or break the company. Once we reduce our cost, there will be that much less of a problem. Think what it would be like working in an organization where we each took responsibility for our actions. Our company activities would flow more smoothly and employee morale would increase.

When the memorandum on adjusted medical and prescription plans was routed, some employees reacted in an appalling manner, with comments such as, "Pretty soon they will cancel health care altogether." Would we choose to sacrifice a coworker's job or pay a minimal fee for health care? Stop and think about what we are doing to ourselves. By expressing doom and gloom, moaning and groaning, and in essence, panicking about our state of affairs, we are surely setting the stage for failure.

We don't have to feel helpless and give up. If you saw a person drowning in a lake, would you stand there and watch? I doubt it. You would either go for help or assist the person yourself. We must each do our part to assist our company during these tough times. Complaining won't help, but positive action will.

Tools and Equipment

Pay for Performance

Working Conditions

Work Load

Public Relations

Space Systems Survey Update

Status of Space Systems' Employee Survey issues will be addressed in the next edition of the quarterly Survey Update newsletter. Watch for this publication in early August.

National Spaceweek

In celebration of National Spaceweek this year (July 22-26, 1987), Space Systems Division and the Reuben H. Fleet Space Theater are jointly sponsoring a free space symposium featuring speakers from General Dynamics and other aerospace-related organizations.

The topic of discussion is space today and in the future — "Charting Our Future in Space."

All programs are free and open to the public. No reservations will be taken; seating is limited and on a first-come basis. Each program is approximately one hour long.

Questions can be directed to the Reuben H. Fleet Education Department at 238-1233 ext. 208/213, or Yolanda Mendoza at 78561.

Space Systems Speakers:

Edward Bock

July 23 — 4:30 p.m.

"Atlas & Centaur: A Historical Perspective and Projections for Future Applications"

Michael Simon

July 25 — 2:30 p.m.

"Putting NASA and America Back in Space"

Dr. Bruce Cordell

July 26 — 2:30 p.m.

"The Case for Mars"

Employment

For the week ending July 3, Convair Division employment was 8,811; Space Systems Division employment was 2,794.

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Gold Coast Engineering accepts the Small Business Subcontractor of the Year Award. From left are Don Berhow, Procurement manager; Lorise Maynard, Small Business administrator; Ted Walker, Procurement manager; LouAnn Wellman, Gold Coast manager of Purchasing; Steve Gamelson, buyer; Chuck Sutherland, Gold Coast vice president, and Donald Palumbo, Gold Coast president.

Gold Coast Engineering Receives Convair Award

Each year Convair presents one of its many subcontractors with the Small Business Subcontractor of the Year Award. At the recent annual countywide Small Business Administration ceremony, Gold Coast Engineering received this honor.

Gold Coast was selected for the award because of the excellent manner in which the company improved its material handling

process, provided suggestions for better and faster fabrication, met schedules, and delivered quality products.

In a letter to Gold Coast President Donald Palumbo, Russ Babcock, division vice president - Procurement, stated, "Our suppliers' performance and support are a vital part of Convair's success in the aerospace industry. Gold Coast Engineering has distinguished itself as one of our highest quality and most supportive suppliers."

DSD Site Office Established at Space Systems

Data Systems Division (DSD) established a site office at Space Systems Division in April 1987 to facilitate the interface for data services and systems.

Linda Buhrig serves as the site manager, and Lyndon Shaftoe is the customer services specialist. Their priorities are to ensure that quality data services and cost-effective data systems are provided to Space Systems.

Additionally, the site office acts as a focal point for DSD activities and helps to resolve issues regarding requirements, capabilities, and service performance.

The site office is currently working with DSD-Western Center and Space Systems on service agreements, asset reconciliation, and application-program disaster recovery planning.

For further information on how the site office can assist you, please call 78988 or 78989. The mail zone is C2-7153.

TLAM-C Performs Successful Launch

Tomahawk Land Attack Missile - Conventional (TLAM-C) T830 was successfully launched from USS Salt Lake City (SSN 716) off the California coast on July 10. The missile flew a typical land-attack mission to the Naval Weapons Center, China Lake, California, test range where (in the horizontal mode) it impacted a simulated target.

The total flight time was approximately 42 minutes, and preliminary evaluation of the flight-test data indicates that all flight-test objectives were achieved. The flight of T830 was part of the Navy's Operational Test Launch (OTL) program.

Congratulations to the Tomahawk team.

Ethics Dilemmas

Conflicts of Interest — Items of Value

According to Corporate Policy and Procedure (CPP) 23-106, the giving of meals, refreshments, gifts, and other items of value to customers or potential customers of General Dynamics is prohibited.

The following CPP excerpt details the guidelines concerning meals given to federal executive agency personnel (military, civil service employees, DCAS, etc., including their family members).

Appendix A

2. Items of Value

A. MEALS — Business lunches, breakfasts, dinners, refreshments, and cocktails, within or outside of the workplace.

(1) Neither the Company nor its employees may provide such items of value to Agency personnel unless the Agency employee pays for his/her actual share of the costs directly or reimburses the Company employee providing the items of value.

(2) Company employees who expect to be so involved with Agency employees must inform them well in advance of this Company procedure in order that prior arrangements may be made for payment by Agency employees. Agency employees eating in Company dining rooms are expected to pay for the meal and must be informed of this expectation in advance.

(3) Company employees seeking reimbursement for their share of the meal, must indicate on their expense reimbursement form that the Agency guest paid his or her actual share of the meal. The Company also will not reimburse employees for their share of the meal in cases where the Agency guest did not pay his or her actual share of the expenses.

(4) Company employees are not to invite Agency employees to restaurants or other facilities or gatherings which the Agency employee cannot reasonably be expected to afford.

(5) The Company strictly forbids any arrangement in which a Company

employee offers to pay the full cost of a bill subject to a promise by the Agency employee to reciprocate at some future time.

- (6) This procedure does not forbid Company employees and Agency employees from sharing meals or refreshments, but describes the considerations that must be observed in arranging such business meetings.

If you have questions regarding these policies, call your Ethics Hotline: Convair — John Barrows, 38120; Space Systems — Dick Neal, 38367.

AF Recognizes ILS

Convair's Norm Tipton, director - Integrated Logistic Support (ILS) recently received a plaque from the U.S. Air Force in appreciation for "outstanding support provided to the Air Force Education with Industry Program."

Since 1981, ILS has had six Air Force officers participate in the program. "The Education with Industry Program is an extremely valuable educational tool which benefits not only the participants, but also benefits industry," Tipton said. "We in ILS certainly garnered mutual benefits."

ILS's Roy Summers received an individual plaque in special appreciation for his close association with the program.

Volunteer Workers Needed for St. Vincent de Paul

On three consecutive Saturday mornings (August 8, 15, 22) the St. Vincent de Paul Center will be moving furniture from Kearny Mesa to the new center facilities at 1501 Imperial Avenue. Volunteers are needed to assist in the move. You can help by volunteering to work on any, or all, of these Saturdays.

For those of you who have already volunteered to work at the center on a regular basis, an orientation class will be held on August 11 from 6-8 p.m. You will be given the opportunity to sign up for preferred training at this session. The center will contact you with details.

For more information and to sign up to help during the move, call Glen Richardson, 77083.

From the Health Fitness Center

New Hours Are Here. The CRA Health Fitness Center has started opening its doors earlier. The new HFC operating hours are Monday & Wednesday 6:00 a.m. to 8:00 p.m., Tuesday & Thursday 9:00 a.m. to 8:00 p.m., Friday 6:00 a.m. to 7:30 p.m., and Saturday 9:00 a.m. to 5:00 p.m. Come take advantage of the earlier hours and start your day with exercise!

Pinecrest Park — the Great Escape

Convair Recreation Association's 90-acre Pinecrest Park, near Julian, is an ideal spot for camping, hiking, swimming, picnicking, or just relaxing.

Weekend visitors have been plentiful at the park, and the response to the rental trailers available has been tremendous. But if you want to beat the weekend throng, try vacationing at the park during the weekdays. The rental trailers are more accessible, and you will have more of the park to yourself.

For more information on Pinecrest, or to make reservations, call CRA at 39933.

Battle of the Corporate Stars

On Saturday, July 25 at 8:00 a.m., preliminary trials for the San Diego Corporate Battle will be held near Peterson Gym at San Diego State University.

Events include a 5k run, 60-yard dash, "Beach Bum Relay," obstacle course, 50-yard freestyle, "Dress for Success Relay," tug-of-war, "Surfin USA," and more.

Come out and cheer on your coworkers. For more information, call 39921.

Convair Makeup Training Classes

On Tuesday, July 28, Convair will conduct makeup training classes for Ethics, Expense Reporting, Time Cards, and Security. These classes will be held at Kearny Mesa, Building 17, room 2, at the following times:

Ethics 7:30-11:30 a.m.
Expense Reporting .. 12:30-1:30 p.m.
Time Cards..... 1:30-2:30 p.m.
Security..... 2:45-4:30 p.m.

Please contact your departmental training coordinator for more information.

Join Convair Toastmasters

Convair Toastmasters is a CRA club that has been helping General Dynamics employees improve their communication skills and leadership abilities for more than twenty years. Toastmasters can help you speak confidently, think on your feet, and listen effectively.

Membership is open to anyone, and guests are invited. The club meets every Wednesday at 5 p.m. in room C of the CRA clubhouse at Missile Park. For more information, please call Ken Daniszewski, 33678.

Watch for a special upcoming General Dynamics World on the Employee Survey status.

June Retirees

Thanks and best wishes for a happy retirement to these employees who retired in June:

Name (Classification)	Years of Service
Robert K. Bond Operations Supervisor	30
Herbert A. Buehler Group Engineer	35
Robert C. Foster Engineer	28
Luther D. Girton Engineering Specialist	36
Herbert C. Heath Accounting Specialist	35
Jeanne M. Kramer Staff Secretary	30
Hugh T. Kratz Engineer, Senior	11
Billie L. Laursen Management Clerk, Senior	26
Frederick S. McCullough Accounting Analyst	30
Henry R. Morrow Machinist A. Mechanical	32
Mason K. Riely Engineering Specialist	4
Cirillo G. Rojas Aircraft Assembler	43
Henry M. Salisbury, Jr. Engineer, Senior	18
Sylvia Stern Engineering Data	28
John E. Vondracek Engineering Specialist-QA	32
Millard K. Winslow Logistics Supervisor	30
Vern D. Winslow Quality Engineer	40
Gene A. Worschek Engineering Specialist	28

Certificate Programs at SDSU

San Diego State University's College of Extended Studies offers a number of professional certificate programs. These programs provide an excellent opportunity to gain career expertise and acquire new knowledge. For more information, call 265-6255.

Employment

For the week ending July 10, Convair Division employment was 8,790; Space Systems Division employment was 2,800.

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CONVAIR

WEEKLY LOG

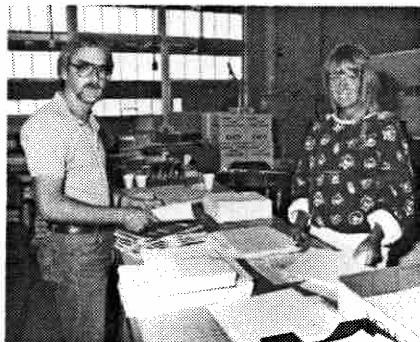
July 27, 1987

SPACE SYSTEMS

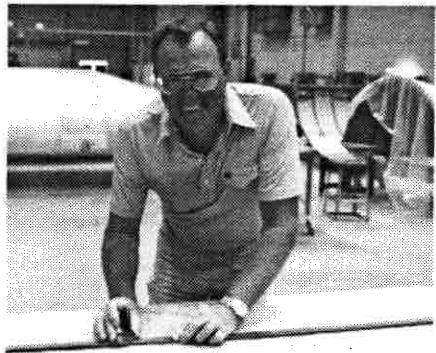
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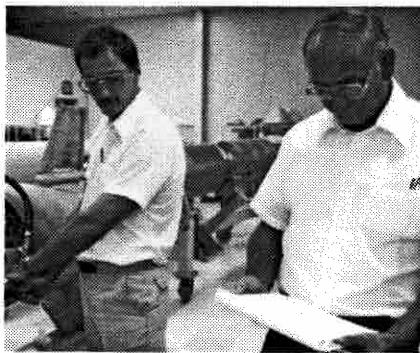
From right, Sharon Anderson and Linda Maize issue supplies to Jodie Thompson.



Emmett Capossere and Robin Garcia operate a Xerox machine in Graphic Reproduction.



Ken Winegarner prepares a nose fairing seal for an Atlas.



From left, Dave Slade and senior test engineer Jerry Archambeault conduct a pressure test on a Tomahawk.

Business as Usual

During the current strike, many Convair and Space Systems employees have been reassigned to job responsibilities normally performed by IAM members. This means new training for many, while others are applying skills which they acquired in the past.

In the Cruise Missile Final Assembly Area, Dave Slade, department 060 mechanical test engineer, was conducting a high-pressure pneumatic test on a vehicle. "This is a good opportunity for me to help the company during the strike situation," Slade said. "We need to keep the missiles flowing through the production area, and we're doing our best to see that's done."

Space Systems' Ken Winegarner, Operations supervisor, was on the production floor in building 5 at Kearny Mesa preparing seals for Atlas nose fairings. "I've been in the space business for 32 years," Winegarner said, "and this assignment is no problem. In fact, you get a sense of pride in

being able to do what your people do each day. We're also made aware of the need to maintain the same level of quality that we require of our production workers."

"We're having fun," Robin Garcia of Art & Editorial said as she operated the Xerox machine in Kearny Mesa's Graphic Reproduction area. Her coworker, Emmett Capossere, said "I'd rather have the strike settled, but we're doing what we can to keep things rolling and to satisfy our customers."

As she issued supplies to a customer, Linda Maize of Research & Engineering said, "I think this is an unusual experience. It's great exercise working in Engineering Supplies."

Overall, the attitudes of our people re-assigned during the strike have been very positive. The spirit of willingness and the "can do" approach reflect the professionalism and dedication needed to ensure that our operations continue.

Tomahawk Achieves Four Successful Test Launches

Four Tomahawk Cruise Missiles were flight tested July 17 through 19, continuing our string of successes in the U.S. Navy's Operational Test Launch (OTL) program.

On July 17, Tomahawk Land Attack Missile (TLAM) T812:1 was successfully launched from *USS Deyo* (DD989) at 10:30 a.m. PDT. The missile was launched off the coast of Northern Florida and flew a typical land attack conventional mission on the Eglin Test Range in Northern Florida and Southern Alabama. T812:1 performed a target overflight in the Programmable Warhead Detonation (air burst) mode, and was successfully recovered at Eglin Air Force Base. Flight time was one hour and 23 minutes.

Tomahawk Antiship Missile (TASM) T238:1 was successfully launched from the *USS Deyo* at 9:00 a.m. PDT on July 18 in the Gulf of Mexico off the coast of Northern Florida. Equipped with a Recovery Exercise Module (REM), the missile flew a typical antiship mission including overflight of a target hulk. The vehicle was successfully recovered at Eglin Air Force Base after a flight of approximately 59 minutes.

Also on July 18, TLAM T479:1 was launched from *USS Hyman G. Rickover* (SSN716) at 3:30 p.m. PDT. The missile flew a typical land attack mission on the Eglin Range. After target overflight, T479:1 was recovered at Eglin Air Force Base. Its flight time was one hour and 35 minutes.

TLAM T696:1 was also successfully launched from the *USS Rickover* on Sunday, July 19, at 10:00 a.m. PDT. It flew a typical land attack mission on the Eglin Range and was recovered after target overflight. The total flight time was one hour and 35 minutes.

Preliminary review of the data from each of these missions indicates that all flight objectives were achieved.

Congratulations to the Tomahawk team for your continued successes.



Space Systems Receives ASPS Study Award

Space Systems Division has been awarded a seven-month contract from the U.S. Air Force for the next study phase of the Adaptable Space Propulsion System (ASPS) program. In addition to General Dynamics, Lockheed, McDonnell Douglas, and TRW were selected from the ten proposals submitted to the Air Force earlier this year.

The Adaptable Space Propulsion System will be designed to provide upper stage propulsion capability for Department of Defense Satellites and be dual-compatible with the Space Shuttle and Titan IV. This system will use storeable propellants and will be adaptable for use as an autonomous upper stage or as an integrated/integral propulsion system.

Configuration selections will be presented at the September 1987 mid-term review with Air Force presentations to the Secretary of the Air Force scheduled for late January 1988.

A key to the success of this program will hinge on the Space Shuttle upgrade load and performance studies that are presently being conducted by NASA, with study results scheduled for review in mid 1988.

If a validation program is approved, two contractors will be selected in late 1988 with the Full-Scale Development (FSD) program scheduled to begin in late 1990.

Jerry Brown is the Program Manager for ASPS, and Ed Hujak is the Chief Engineer.

Space Systems Receives C/SCSC Validation

On July 15 the United States Air Force's review team director, Capt. James Rego, notified the Space Systems Division that their Cost/Schedule Control Systems Criteria (C/SCSC), SIMS II D/P, system had met all the requirements for compliance with DODI 7000.2. This validation of the division's Performance Measurement System was an important milestone that had to be achieved with the formation of Space Systems as a separate division.

Congratulations are in order to all those who participated in the validation process.



Oman Named SAWE Fellow

Space Systems' Buddy Oman, chief - Mass Properties, has been named a fellow in the Society of Allied Weight Engineers (SAWE) at their 46th Annual International Conference in Seattle on May 20. Fellows are persons who have achieved distinction in mass properties engineering or who have materially contributed to the advancement of the Society. He joins 54 other recipients since the Society was organized in 1939.

Oman has been an SAWE member for 24 years, holding various offices in the San Diego Chapter for a total of eight years and as Director of the Chapter for two years. He has been the Technical Session Chairman in Computer Applications at International Conferences for the past seven years.

Oman has always supported his people in the preparation of technical papers and actively participates in the annual Southwest Regional Conferences. His contributions to his profession have earned him this prestigious award.

SSIP Reminder

During the month of August, you may make percentage and/or option changes to your savings and stock investment plan or you may enroll if you now have one year of continuous service. All changes and applications must be turned in by August 31, and will become effective in October. Change forms and applications are available at Employee Benefits offices.

Employment

For the week ending July 17, Convair Division employment was 8,774; Space Systems Division employment was 2,810.

Engineering Test Lab Members Excel

Lonnie Brown, Don Page, Pete Carrier, and Rolly Lofshult, members of Convair's Engineering Test Labs, recently received Extraordinary Achievement Awards for their key roles in the success of important division programs.

On the Ground Launch Cruise Missile Ground Functional Test program, Brown and Page designed and built the fixtures used to hold the missiles, plus other safety devices to allow them to fire and operate safely in a restrained condition on the ground. Carrier helped coordinate the overall efforts to ensure the successful completion of these tasks against a tight schedule.

Lofshult received an award for his efforts in getting production temperature and vibration test equipment installed and operating for the Advanced Programs.

Kudos to those members of the Engineering Test Labs.



Posing during the Extraordinary Achievement Award presentation are, from left, Dennis Uhlenk, chief - Engineering Test Labs; Don Holzer, group engineer; Lonnie Brown; Don Page; Pete Carrier; Arlan Barber, group engineer; Rolly Lofshult; and Tom Sammon, director - Test & Evaluation.

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Compositor: Dianna Rich

CONVAIR

WEEKLY LOG

August 3, 1987

SPACE SYSTEMS

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The employment processing area at Kearny Mesa is bustling with activity.

Activities Accelerate

Employment personnel and their assigned support people from various departments have been extremely busy during the past two weeks of the IAM strike. Three trailers have been positioned outside of building 1 at Kearny Mesa, and thousands of applications have been processed in response to the ads placed in the local newspapers and on radio.

Supervisors have been conducting hundreds of interviews, and Identification, Central Medical, and Employment personnel have efficiently been processing the new employees. Many of the interviewing supervisors have stated that they are pleased with the caliber and skill level of the applicants.

Coordinating the hiring efforts is Jerry Williams, Employment supervisor. "Everyone has been most cooperative and willing to give 100%," Williams said. "Facilities, Security, Procurement, and Plant Services have tremendously assisted by setting up the trailers, installing the phones, and maintaining tight security controls while hundreds of people enter and exit the processing area each day. We also appreciate the many people who have been spending all day on the phones making reference checks and lining up interviews."

"Our people have done a terrific job in getting things rolling, but there is still much left to be done," Williams said.

Apart from the employment activities, many individuals and entire departments have pitched in to ensure continued operations during the strike. The Plant Protection officers and the observer teams have been working 12-hour shifts each day, and many employees from all departments have been working similar schedules while reassigned.

George Roos, Convair division vice president - Human Resources, said "Our people throughout the division have been very impressive during the strike. I've walked around and talked to many of them. Everyone has reflected a positive attitude and has been willing to fill in whenever and wherever they are needed. I thank them and express management's appreciation for getting the job done."

CRA NOTICE

As a result of the current strike, access to CRA's Missile Park and clubhouse is limited. Individuals interested in entering the CRA should be aware of the following groundrules:

- Active non-striking employees will be asked to show company identification badge at all perimeter guard posts.
- Retirees must show their Retiree Identification Card.
- Family members and other guests may gain access only if escorted by one of the above.
- For the duration of the strike, no outsiders will be permitted to enter the park.
- No striking IAM members are authorized access.

Employees scheduling or attending activities at the CRA facilities will need to make arrangements to accommodate any guests that may be attending. CRA is making every effort to continue operations as normally as possible during the strike. Please call the CRA at 39933 for further information.



The T&O Planners are, from left (seated), Jerry Durden, Jan Hedlun, Rusty Lawrence, Tony Botelho; (middle), Charlie McCoy, Kevin Jansen, Tony Meitler, Marge Longo - instructor, Jerry Davis - instructor; (rear), Phil Baker - instructor, Dean Bjarkman, Del Story, Dave Pearce, and Andy McKay - instructor.

T&O Planners Gain Certification

Space Systems Division Vice President of Production, Jack Coffman, recently presented 10 employees with their course completion diplomas, certifying them as Tool & Operations (T&O) Planners.

Responding to a *Weekly Log* ad in November 1986, the candidates embarked on a

six-week course of classroom training earlier this year, followed by a 90-day probationary period performing actual T&O Planners' tasks.

These graduates comprise the first group to complete this type of training at Space Systems.



The new secured CAD facility is up and running.

Secured CAD Facility

Convair's Facility Management and Facilities Engineering departments continue their efforts to provide the Division with required facilities in a cost-effective manner. Facilities are provided to support production, allow for continued development activities, and improve quality. In addition, facilities are being improved in response to the 1986 Employee Survey.

A secured CAD (Computer Aided Design) facility was recently completed to support the Hypersonic Glide Vehicle (HGV) program. The facility, located in building 4 at Kearny Mesa, was recently completed, saving over \$150,000 from the original pro-

jection. The savings were made possible by using the recently vacated DSD computer facility, thereby taking advantage of existing raised floors and air conditioning. This location also eliminated costly construction requirements for shielding, which is necessary to prevent electrical signals from traveling to unsecured areas. We all need to strive to identify these types of cost effective solutions to continue to upgrade our facilities.

The Facility Management Project Manager for the CAD facility was Harry Estline. Phuong Tran was the Facility Project Engineer.

ADI Team Participates in Display

Members of the Space Systems' Air Defense Initiative (ADI) team participated in the Commander's Day Air Show on June 26 and 27. Held at Griffiss Air Force Base and Rome Air Development Center (RADC) in Rome, New York, the event was a combined air show and technical display on the theme of Technology Transition and History.

Attending the show were Roy Gjertson (display designer) and John Lavin of Convair's Art & Editorial, Bob Malmgren - Corporate manager of the Northeast Field Office, and Space Systems' Tom Lavedas - program manager of Hybrid Bistatic Radar, and Glen Richardson - ADI marketing manager.

The display was a compilation of pictures and hardware of ADI elements such as Hybrid Bistatic Radar and the Hypersonic Glide Vehicle.

Space Systems is leading an ADI study team of General Dynamics, Westinghouse, and GTE. The other General Dynamics participants are Convair, Pomona, Valley Systems, Electronics, and Fort Worth divisions.

The ADI program's objective is to define future defense systems for application against airborne threats such as cruise missiles and aircraft. The major areas of study

are surveillance, engagement, and battle management.

According to Jerry Huston, ADI program manager, the proposal for ADI Systems Integration Study was submitted on July 30, and in mid-September a one-year contract award is anticipated.

The ADI team will repeat the display on August 28 and 29 at the Air Force Electronics Systems Division, Hanscom Air Force Base in Bedford, Mass.



Griffiss Air Force Base Commander, Colonel Charles Franklin, examines the Space Systems' ADI display.

MSOW Agreement Signed

Headed by Convair, a multinational-industrial team has been formed to compete for the Modular Standoff Weapons (MSOW) program. A Memorandum of Understanding to initiate the program now has been signed by seven governments for the NATO Alliance cruise missile program.

The consortium includes Brunswick (U.S.), Dornier GmbH (Federal Republic of Germany), Hunting Engineering (United Kingdom), Aerospatiale (France), Agusta (Italy), Garrett (Canada), and INISEL (Spain).

"We believe that we have established an outstanding team that together has the complementing management and technical expertise required in the development of this multinational program," said Brad Beaver, director of Cruise Missile Programs Marketing. Beaver said that the companies in the General Dynamics team have been involved in a number of previous programs related to MSOW technology.

The agreement among the seven nations specifies the joint development of three versions of the air-to-ground standoff weapon. These include short-range and long-range systems designed to engage fixed targets, as well as a short-range system to engage mobile, armored targets. "Our prime role will be to manage the program and provide overall systems integration and technical oversight to ensure total system performance," Beaver said.

A Request For Proposal (RFP) is expected in August 1987, with a contract award estimated for March 1988. The MSOW could have a potential business value of \$12 billion.

Employment

For the week ending July 24, Convair Division employment was 8,759; Space Systems Division employment was 2,818.

CONVAIR

WEEKLY LOG

August 10, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

TWIN Honors Award Recipients

Convair's Betty Ford and Space Systems' Roberta Baade were recently honored at the annual YWCA Tribute to Women and Industry (TWIN) ceremony held in San Diego. The TWIN program began in San Diego in 1980 to honor women who have made significant contributions to their professions and to recognize companies who are committed to promoting qualified women in management and business.

Betty Ford, group supervisor - Manufacturing Engineering, manages the group responsible for translating engineering blueprints into planning work instructions. She also manages the control and maintenance of the product structure for the master parts list and is responsible for configuration control of deliverable products.

During her 31 years with the company,

Ford has used her team-building skills to increase the effectiveness of her coworkers. In her present position, she influenced a smooth transition to a new computerized planning system, helped develop and implement procedures for controlling classified hardware, and installed controls to ensure product structure and material requirements accuracy.

Training and Development manager Roberta Baade was recognized for coordinating all management training, developing special educational courses for division personnel, and conducting offsite team-building and communication sessions with various departments within Space Systems. She also combined the training function with staff development to create a new department.



Congratulations to TWIN award recipients Betty Ford, left, and Roberta Baade.

Baade has assisted in the development of a supervisor's manual (receiving corporate recognition), and is serving as a point of contact for the Employee Survey Action Plan. She currently is serving on the board for the Center for Management Development at San Diego State University.



Extraordinary Achievement Award recipients for the EEE review are, from left (seated), Sherri Ahlbrandt, Ivy Baughman, Nancy Condit, and Victoria Ullrich; (standing) Duane Quinn, Mike Schweitzer, Bob Williams, Bob Frederick, Mark Kramer, William Roach, Ken Lejman, Robert Parker, Geoffrey Aphorop, and Neil McGuinness.



Group Pacesetter Award recipients for the EEE review are, from left (seated), Gerry McFarland, Brian Ballard, Carl Wannamaker, and Charles Dunkle; (standing) Walt Woolford, Cecil Norwood, Cliff Humphrey, Dan Bergen, Kevin Whelan, Peter Chi, Darryl Adams, and Rick Mortimer.

Space Employees Excel on EEE Piece Parts Review

Don Moore, Space Systems Division vice president of Quality Assurance, recently conducted an awards ceremony to recognize the many people who participated in an extensive EEE (Electrical, Electronic, Electromechanical) piece parts review.

When the Shuttle/Centaur was being manufactured, the customer initiated an EEE piece parts review to ensure that installed components met evolving reliability requirements. During the May 1986 Launch Readiness Review for Atlas/Centaur, it was determined that some of the parts that had been found to be questionable or unacceptable for the Shuttle/Centaur program were common with parts used on the Atlas/Centaur program.

As a result of these findings, Quality Assurance, Parts Engineering, Avionics, A/C Program Office, and Material embarked on a comprehensive and time-critical review of over 10,000 parts to guarantee mission success. Serial numbers had to be searched, inventories surveyed, suppliers screened, and certain EEE piece parts replaced. Thanks to the dedication and diligence of those involved, the review was a success.

Several other Space Systems staff members joined Moore in congratulating the Pacesetter Awards recipients.



TEL/LCC Accomplishments

Hard work and dedication paid off as our TEL/LCC assembly crew (Department 036) achieved three significant milestones.

TEL 112 was delivered to the Air Force, satisfying a critical overseas deployment commitment. In addition, TEL 113 successfully completed its Acceptance Test Procedure, which is a major milestone prior to final paint and preparation for de-

livery. The strongback for TEL 114 was fully assembled and pulled from the assembly fixture in preparation for paint and mating with the trailer at the system level.

These accomplishments were critical in order to ensure that TEL/LCCs are delivered on schedule this month.

Congratulations to Department 036 for their efforts.

Space Systems Engineers File for Patent

Recently, four Space Systems Division engineers had a patent application filed with the U.S. Patent Office. Mickey Cornwall (Department 863-1), Bela Kaincz (Department 848-1), James Mildice (Department 873-0), and Theodore Stern (Department 873-0) contributed to develop an invention disclosure entitled "Point Focus Solar Concentrator Using Reflector Strips of Various Geometries to Focus Primary and Secondary Reflectors."

Solar dynamic conversion systems are a potential new energy source for high-power spacecraft such as NASA's Space Station and SDI mission applications. Such systems are usually designed with a large parabolic dish that is hard to fabricate and package for launch. This invention replaces the parabolic dish with an array of shallow reflector strips, which are curved in one direction only. The concentrated solar energy is collected for conversion into electricity by a turbogenerator engine. By using these nearly flat strips, the concentrator is easier to fabricate, assemble, test, fold, package and deploy, compared to parabolic dish designs.

"This invention allows a large concentrator to be deployed automatically, without astronaut assistance," says Cornwall, who is the program manager for Space Power

Generation Systems. "This would make them useful for unmanned applications, so that they could be launched by an expendable vehicle such as our Atlas/Centaur."

This group of engineers continues to be inventive, with ten patent applications filed among them at General Dynamics. Each inventor received a \$300 patent award when the patent application was filed.



From left, James Mildice, Bela Kaincz, Theodore Stern, and Mickey Cornwall display their invention.

Mark Your Calendar!

Santa Maria Barbecue, Saturday, September 19 at Missile Park. Watch for more details.

Appreciation Party Planned for Pete Autio

"Everybody smile. 'Click.' One more time. 'Click.'" For the past 30 years, Pete Autio rendered these words while taking countless photos at awards functions, dinner meetings, and product ceremonies. Now he's retired.

To show appreciation for his contributions to the company and its publications, a farewell party has been planned for Pete on Monday, August 31, at 5:00 p.m. at Missile Park.

Beginning Wednesday, August 12, tickets (\$7.50) will be available from the following.

KM: Still Photography 73205

Doreen Gorostiza 38133

Cal Samuels 39955

LF: Billie Birdsong 28646

Plt. 19: Lorna Pohl 25534

CP: Julie Andrews 79004

DSD: Jet McConnell 33690

Supervisors' Notice

Supervisors are required to brief all new employees on the General Dynamics Standards of Business Ethics and Conduct. Although business ethics will be discussed during the New Employee Orientation (NEO), all new hires must have an overview of the Ethics Program prior to NEO attendance.

Lindbergh Field Parking Improved

During the Employee Survey Feedback sessions, one of the concerns expressed was the parking situation at our Lindbergh Field plant. As a result, Convair division vice presidents Russ Babcock, Ken Lake, and George Roos formed a committee to evaluate the situation and make recommendations for improvement.

Action has already been taken, and improvements were completed on August 2. Lot 11 (back lot) now has an additional 256 parking spaces due to a restriping plan, and directional markers (noting one-way traffic flow) have been put in place to expedite entering and exiting the facility, thereby improving pedestrian and vehicular safety.

Lots 3 and 4 are presently being examined to determine if realignment would provide additional parking spaces and improved traffic flow.

Employment

For the week ending July 31, Convair Division employment was 8,762; Space Systems Division employment was 2,817.

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GLCM Scores Three Successful Launches

Three Ground-Launched Tomahawk Cruise Missiles were successfully flight tested on July 28 and 30 at the Utah Test and Training Range (UTTR). Preliminary review of the flight test data from each mission indicates all flight test objectives were achieved.

Missile T857:1 was successfully launched at 8:00 a.m. PDT on July 28, followed three hours later by the successful flight of GLCM T926:1. GLCM T921:1 was also successfully launched from the same Transporter Erector Launcher (TEL) on July 30.

All three missiles flew a typical GLCM mission on the range at UTTR and were successfully recovered after target overflight. The total flight time for each vehicle was one hour and 58 minutes.

These three flights were part of the Air Force Follow-on Test & Evaluation (FOT&E) Phase II program, and bring the 1987 GLCM flight test success record to five for five.

July was a banner month for the Tomahawk team, with eight successful flight tests.

Last Chance For Offset Vacation Loans

General Dynamics has been offering offset tours to employees, their families, and friends since 1984.

In November 1986, interest-free tour loans were introduced, offering special employee discounts for maximum flexibility and value.

The GD Offset Vacation Program will be phased out by December 31, 1987. Employees and retirees have until then to take advantage of the company's interest-free loan program. Company-financed travel must commence no later than the 31st.

Percival Tours (Orient) and World of Oz (Turkey) have agreed to continue to offer their ongoing tour programs to employees at the same discounted rates.

For more information and brochures, call General Dynamics Travel Services. Ask for Norma at 78327.

Notice

All hourly employees please remove red and black stickers from your ID badge.



Members of the CSAS team are, from left (front) Karen Kline, Kerry Hulick, Ann Densmore, Morgan Hinkle, Tricia Horn, Joy Straub, Arnie Millard, Betty Fox, Ann Hilleary, Bart Ackerman, John Berg; (back) Mike Bonine, Ken DeVane, Todd Davison, Tim Henderson, Paul Bernstein, Ralph Allen, Jack Warso, Dale Russell. Not pictured: Bob Constantino, Dave Johnson, Joe Hebert, Jack Wolff.

CSAS Tracks Missile Configuration

Since June 1, the Configuration Status Accounting System (CSAS) has been used for DD250 processing of missiles and pre-induction planning at Convair and McDonnell Douglas. CSAS is a tool to track the configurations of the Tomahawk Cruise Missiles from design through production and depot maintenance.

This represents the culmination of a dedicated effort on the part of several departments within Convair. Configuration Management is responsible for maintaining in CSAS the configurations of the missiles as they were designed and contracted by the government. They were also responsible for entering historical data on FY81 through FY84 missiles. Recently, the tasks performed by the Logistics Resource Control System (LRCS) were integrated into CSAS with the removal of LRCS scheduled this summer.

Tuition Reimbursement Reminder

Convair Division Notice 87-13, Revision A, dated May 28, 1987, provided information on the new tuition reimbursement policy. The following serves as a reminder for this new policy.

The training budget and tuition reimbursement program for employees attending private colleges or universities on Plan 2, as described in Personnel Administration Manual (PAM) 1-4, have been changed due to significant reductions in our indirect budget.

Reimbursements for approved Plan 2 courses will be limited to \$100 per semester hour, and no more than \$400 per course.

Integrated Logistic Support has been heavily involved in this transition and is responsible for entering the production and depot maintenance data into CSAS. Quality Assurance and Operations have assisted in coordinating the DD250 sell-off process.

CSAS is operated on Hewlett-Packard hardware that is owned by the Government, with the main computer located at Kearny Mesa. The software was adapted from a system developed by the Air Force for the Air-Launched Cruise Missile and has been tailored to meet the Tomahawk program requirements under the management of the All-Up-Round System Engineering and Integration Agent (AUR-SEIA) at Convair. Data Systems Division provides the programming staff to support this effort.

If there are any questions regarding CSAS capabilities, contact AUR-SEIA at 49057.

The Tuition Refund Request, Form A346, has been revised to incorporate the following requirements:

- The employee must certify that each course is job-related or required to complete a job-related degree, and that reimbursement is not being received from another source.
- Each form must be approved by supervision/management and Human Resources - Training & Motivational Programs, prior to starting the designated course.

If you have questions, please contact the Training Department at 39950.



B.R. (Bernie) Migas, program director, Rail Garrison.

Migas Appointed Director of Rail Garrison

On July 20, John McSweeney, Convair general manager, announced the appointment of B.R. (Bernie) Migas to the position of program director of the Peacekeeper Rail Garrison program.

The Rail Garrison concept provides a survivable basing mode for the MX Peacekeeper missile. Involved in this project for more than a year, Convair is currently focusing on the competition for full-scale development of the missile launch car which is capable of transporting, erecting, and launching the Peacekeeper.

After graduating in Aeronautical Engineering from the University of Michigan in 1961, Migas began his career at Boeing in Seattle. He has held various management positions with Boeing, including manager of the Pasadena Office which provided technical support to the Jet Propulsion Laboratory. In 1978, Migas returned to Seattle to serve as program manager of Advanced ICBM, precursor to the Small ICBM.

Facility Improvement

The 3,000-square-foot courtyard adjacent to the Avionics Development laboratories in Kearny Mesa's building 4 is being refurbished to provide employees with a relaxing, aesthetically pleasing break and lunch area. This improvement is a result of a Quality Circle project.

The complex will be completed this month, and will include picnic tables, benches, two covered areas, and landscaping. This particular courtyard was selected to accommodate people working in the avionics labs where, because of cleanliness requirements, food and beverages are prohibited.

Conflict of Interest

Employment of Government Personnel

In order to avoid possible conflicts of interest, defense contractors are required to follow certain procedures when attempting to hire retiring government and military personnel.

Current U.S. Government employees must file a disqualification statement (per DoD directives) prior to commencing employment negotiations with a company. General Dynamics also requires prospective employees currently working for the government to furnish the company with a copy of this statement. Such negotiations include telephone inquiries, personal contacts, and written correspondence prior to termination of government employment.

For further information on this issue, contact the ethics program director: Convair - John Barrons, 38120; Space Systems - Dick Neal, 38367.

Employment

For the week ending August 7, Convair Division employment was 9,000; Space Systems Division employment was 2,880.



From left, Glen Bates, Bill Colahan and Dave Leslie work around the cockpit of the PBY-5A being refurbished for the San Diego Aerospace Museum.

PBY-5A Revisited

by Glenn Lindeneau, Convair Retiree

Many of you probably remember Glen Bates and Bill Colahan as General Dynamics retirees and former coworkers. It isn't likely that you will recognize Dave Leslie, unless you were assigned to a PBY flight or ground crew at Johnson Island in 1944.

Leslie is a retired Navy pilot and happy to have the opportunity to work on this particular aircraft. In fact, Dave and PBY-5A (Navy Tail No. 48406) are getting reacquainted. He flew her as a co-pilot over the Pacific during the spring of 1944.

While attached to Group VP200, Dave flew anti-sub search patrols and rescue mis-

Take Time for Time Cards

New Employee Orientation for hourly employees will be held on Friday, August 21, from 8:00 to 11:00 a.m. at Lindbergh Field, building 14, auditorium. Supervisors of new hourly employees at Lindbergh Field and Plant 19 are responsible to ensure that these people attend this important session which covers time card, security, and ethics training.

Contract laborers are also required to attend the time card session.

Departments needing additional time card training should contact Vicki Jarvis, 24675, or the Labor Charging Help Line, 24647.

Humor Month at Toastmasters

August is Humor Month for Dynamic Toastmasters. On Thursday, August 27, Toastmasters will host the Humor Speech Contest Finals from 5:00 to 7:00 p.m. at the CRA, room C. Everyone is welcome to experience what Toastmasters is all about and have a great laugh too. There is no cost and refreshments will be served.

For more information please contact Caroline Harbeck, 75743, or Diane Windland, 26829.

sions in the area of the Marshall and Gilbert Islands. There were two PBY's stationed on Johnson Island that flew on alternate days.

Leslie read about the refurbishment task and recognized the tail number from his personal flight log. He requested permission to help and has been busy ever since, along with General Dynamics retirees and San Diego aerospace people.

There are now 30 to 35 retirees working on the PBY-5A and L-13 aircraft which are colocated in the hangar at Harbor Drive. The L-13 is now nearing completion and the entire crew will be putting their efforts on the PBY-5A.

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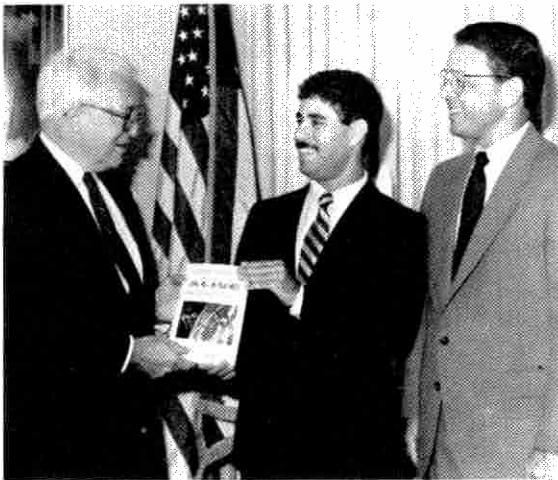
Keeping the Dream Alive

Ten years ago a NASA study team projected that by 1987 the Space Shuttle would have completed over 200 missions, permitting an expansive manned Space Station to begin operating in low Earth orbit. It was also predicted the U.S. would begin transporting lunar ore from the surface of the moon, creating a need for an enormous space factory.

Why hasn't this dream become a reality?

The answer to this question and the future of the American space program are addressed in a newly released book, *Keeping the Dream Alive — Putting NASA and America Back in Space*. Author Michael Simon, Business Planning administrator for Space Systems Division, gives an inside look at the successes and failures of the space program, and explains why NASA hasn't achieved its ambitious plans for the 1980s.

Simon worked for NASA Headquarters when the first Space Shuttles were flown,



Mike Simon, center, presents a copy of Keeping the Dream Alive to General Manager Alan Lovelace, while Dick Hora looks on.

and has helped establish several of the nation's largest commercial space enterprises. In his book, he provides suggestions for the right role of the Space Shuttle, effective de-

velopment and use of the Space Station, and ideas on how to reduce space development costs. The book also discusses long-term space projects such as lunar bases and space colonies, that can be undertaken if these goals are met.

Alan Lovelace, Space Systems general manager, said, "I think this book is insightful to the future of America's space program. It is timely in that the U.S. program is just beginning to reconstitute itself after the *Challenger* incident."

Space Systems Dick Hora, director of Planning, commented on Simon's work. "Mike has a personal drive and interest in this area that I really haven't seen in anyone, either inside or outside the company. He's been in the right place at the right time to gain the expertise and information necessary to create such a book."

Keeping the Dream Alive is being offered for sale at the Convair Recreation Association. Interested employees can purchase a paperback edition at a discount.

Employee Survey Issues

Tom Peters on Quality

The following article by Dave Olstad, Convair Division Planning, provides some insights about Tom Peters' ideas on quality. Peters is a renown quality expert and business writer.

Tom Peters, author of *In Search of Excellence*, writes a weekly newspaper column in which he comments on the latest issues, trends, and fads in the business world. While he typically confines his discussion to the consumer goods industry, there may be some value in applying his ideas to the aerospace and defense business in general, and GD in particular. A favorite topic, and the subject of his latest column (*San Diego Union*, August 10) is quality. It is Peters' opinion that U.S. trade problems are a direct consequence of our foreign competitors' devotion to producing quality products. He feels that the only way to improve America's competitiveness is by instituting a "quality revolution."

Peters concurs with other quality "gurus" in that there are four ingredients necessary to make significant quality improvements within a company. Those ingredients are:

1. Systems. Statistical process control techniques must be implemented across the board. In addition, there must be constant measurement of quality-re-

lated costs (rework, inspection, etc.).

2. Top management commitment. Senior managers must demonstrate that quality is the number one priority.
3. Emphasis on customer perceptions. Attention should be paid to the intangibles, the fits and finishes, the "unexpected sources of delight" for the customer.
4. All-encompassing people-participation program. A program should be instituted that includes extensive training, massive recognition efforts, self-managing teams, and financial incentives.

Where Peters departs from the mainstream of quality improvement thinking is on the priorities he places on each of the four elements above. Using a priority rating system in which a total of 100 points is allocated based on the items' importance, Peters ranks the four ingredients as follows:

People-participation program — 40, top management commitment — 25, customer perceptions — 25, systems — 10.

It has been Peters' observation that truly successful companies place the most value on people and the least on systems (although all four elements are essential). For the most part, however, companies tend to do just the opposite — placing most of their emphasis on systems. While some

companies are getting on the right track by confronting the quality issue, this misdirected sense of priorities can become a crucial stumbling block. It takes a serious commitment and properly placed priorities to bring about the kind of quality revolution that Peters believes will restore America's competitiveness.

In a future edition of the *Weekly Log*, employees will be informed of what Convair is doing to focus on quality as it relates to interdepartmental cooperation and teamwork.

Presupervisory Training to be Resumed

The last two sessions of the community college presupervisor course number 150 (Convair specific) will be held in classroom number 6, building 17, Kearny Mesa facility on Monday, August 24 and Monday, August 31. The classes will begin at 4:30 p.m.

Course number 120, "Instructor Training for Supervisors," will be resumed at Lindbergh Field as soon as possible. Please watch the *Weekly Log* for specific dates.

Mark Your Calendar!

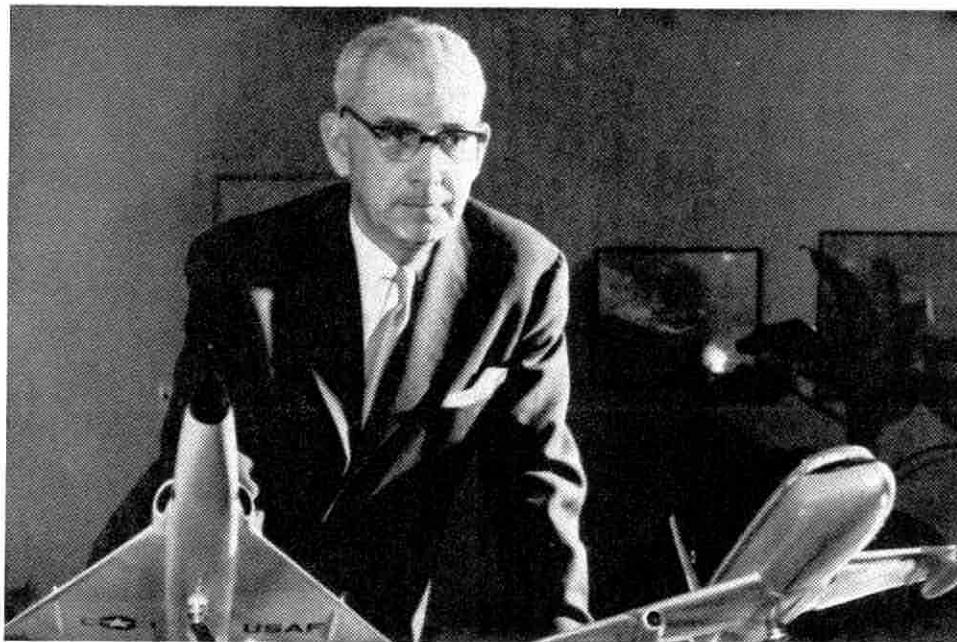
Santa Maria Barbecue Saturday, September 19, at Missie Park. Tickets are available from NMA Space Systems Chapter boosters.



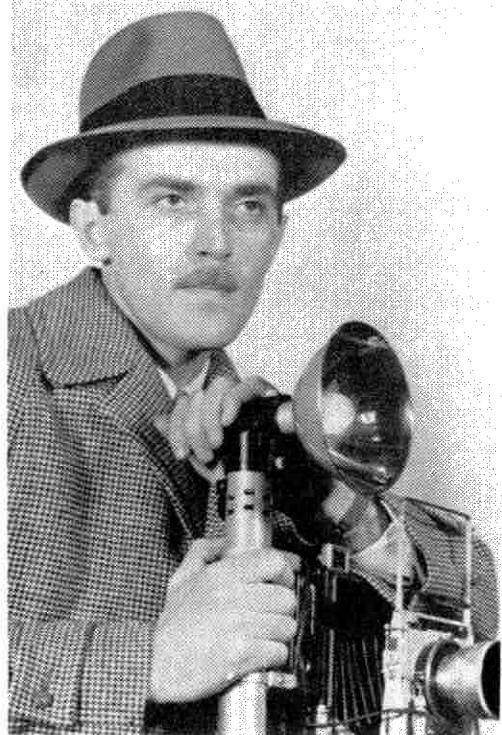
Returning from WWII.



Pete in the third grade (third from left, second row).



Pete's first job at Convair. Jack Naish portrait – new president, February 1958.



Pete in 1950 after graduating from Eastern Photography School.

The End of an Era

A Tribute to Pete Autio

Pete Autio is an extraordinary artist. For 30 years his brush has been a camera and General Dynamics his canvas. From his first assignment to photograph new Convair president Jack Naish in February 1958, to his last, award plaque photos for Space Systems Division in 1987, Pete has certainly earned his reputation as the best in the business.

Pete's career at Convair took him on assignments across the United States, to Europe, and even to remote Arctic regions. He has photographed thousands of employees, kings and queens, presidents, and Hollywood celebrities.

But Pete's career has been much more

than the famous facés that adorn his photo studio. With his camera he has told the General Dynamics story, through vivid and often breathtaking pictures.

He shot products in all stages of development and production, space launches, company picnics, National Management Association dinners, and countless other events throughout the corporation.

Almost every office at Convair (and many other GD divisions across the country) displays pictures of Pete's work, including San Diego harbor panoramas and nature scenes.

The true artist can make the elements of his chosen career appear easy to master. But looks can be deceiving. Pete has had a great variety of personal experience and that variety adds to his impact as a photog-

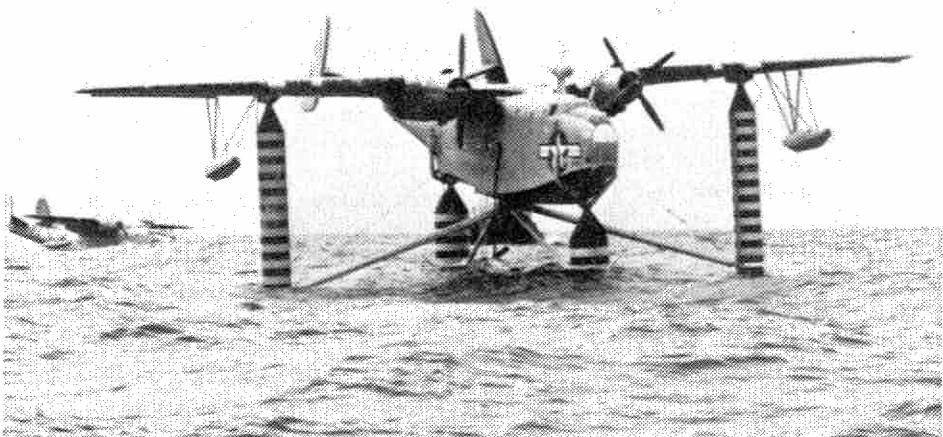
rapher. Although he took a number of detours, it seems that Pete was always destined for a career behind a camera.

Born in Valkeakoski, Finland in 1921, Pentti (Pete) Autio had a storybook childhood despite growing up during the Depression.

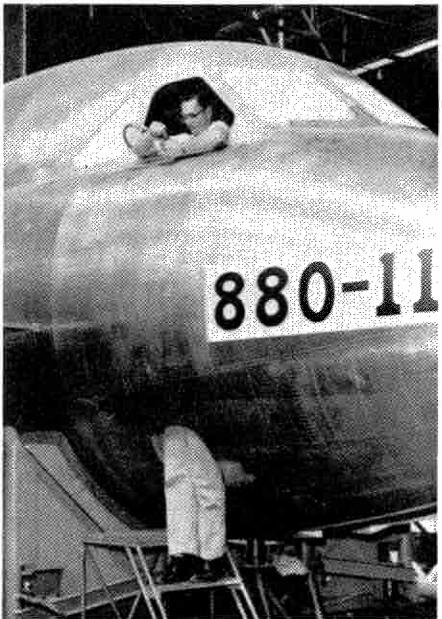
"Times were rough but we always managed to get by," says Pete. "My fondest childhood memories are of the times when my older brother and I visited my grandmother's cottage in the country. We spent our summers fishing and swimming in a nearby lake. During the winters, of course, we would ice skate."

It was during this time that Pete was introduced to what would become his life's work.

"I took my first photograph when I was



The Stilt Program.



The tallest man at Convair. Photo appeared in New York News Sunday Magazine.



Pete Autio — 1987.

ten years old," he says. "In Kokkola, Finland where I grew up, a man named Hannes took pictures of people visiting the park. One day before leaving for lunch, he asked me to photograph the people while he was away."

Thus began Pete's illustrious photography career, right? Well, sort of. He had a brief stint traveling with a circus one summer, taking care of Dickie the elephant. As Pete says, "That certainly taught me to watch my step through life."

Pete wasn't quite ready to make photography his full-time occupation. His sense of humor and eye for adventure would keep him busy for a few more years.

The Finnish Sailor

"It was June, 1937," Pete recalled. "I had



Pete in Europe — freelancing.

decided it was time to head out on my own. I kept asking the first mate of a local cargo ship for a job and he finally hired me as a cook's helper. Later on, I became a fireman in the merchant marine."

For the next four years, Pete's home would be aboard ship, at numerous ports of call.

"Once we docked in Colombia and I wanted to see the countryside," he says. "I hired a local guide to take me to an Indian village. I gave him instructions to come back and get me in a couple of days so I wouldn't miss my ship."

"Unfortunately, he didn't return for two weeks. I spent my time enjoying the hospitality of the natives. I finally had to return to the ship."

In 1941 Pete's ship was seized in Cuba

for political reasons. He spent over three months there in a detention camp. "All we ate was rice, rice, and more rice," Pete said. "They finally put all 32 of us on a little fishing boat and took us out to another Finnish ship which was anchored offshore. From there we set sail for New York."

The War Years

Pete's ship arrived at Ellis Island two days before Pearl Harbor was bombed. He remained at Ellis until February 2, 1942, when he was given papers allowing him to remain in the United States.

He worked briefly on a farm in Connecticut but moved on to a Finnish community in Quincy, Massachusetts. Pete remained there until he joined the U.S. Army

(See Pete Autio Page 4)



(Pete Autio from Page 3)

in April 1943. While completing basic training in New Orleans, he became a United States citizen on September 11, 1943. He was later stationed in Little Rock, Arkansas.

Pete's journey continued when his Army unit was transferred to Scotland. He participated in the Normandy Invasion and also took part in the Allied offensive into Germany near the end of World War II.

When the war was over, Pete was granted furlough to visit his family in Finland. "I checked with the authorities to see if I could wear my American Army uniform into the country," Pete said. "I was the first GI to wear a uniform into Finland after the war."

Photo Career

Pete remained in the Army until 1948. He then enrolled in the Eastern School of Photography in Boston. While studying at Eastern, Pete was very active in Finnish community activities. He wrote for magazines and newspapers, and performed in Finnish drama in the Boston area.

Upon graduation from photo school in 1950, Pete worked for a naval ammunition depot for two years in New England. He then moved to California where he spent the next five years in the photography depart-

ment at North American Aviation.

Pete left North American in 1957. From there he spent an adventurous year freelancing and traveling through Holland, Belgium, France, and Spain in a horse-drawn covered wagon.

When Pete returned from Europe, he began his long career with Convair in February, 1958.

One of the highlights of Pete's career was being elected a member of the American Society of Composers, Authors, and Publishers. The honor was bestowed upon him mainly for writing a song that was widely popular in Finland.

Pete's retirement certainly marks the end of an era at General Dynamics and he will be missed. However, he's hardly ready to relinquish himself to a rocking chair.

An avid golfer, Pete will continue to participate as a field judge in the San Diego Optimist Junior Golf Championship. His daughter, now a freshman at San Diego State University, won that event's girls division a few years ago. Pete will also continue his interests in painting, poetry, and crossword puzzles.

The *Weekly Log*, on behalf of everyone at General Dynamics in San Diego, thanks Pete for his years of service and friendship. We wish him a happy and prosperous retirement.

"Fry Now — Pay Later"

To prevent the discomfort of sunburn and to avoid the detrimental effects of prolonged exposure to sunlight (UV-B waves), the following precautions are strongly recommended by our Medical Department staff:

- Limit exposed areas. Wear long-sleeved, loose clothing and full-length pants rather than T-shirts and shorts. Use head wear with a wide brim or sun visor. (Remember that scalps and tops of ears are vulnerable to sun damage.)
- Apply sun block/sun screen lotions and gels. However, Para-Amino Benzoic Acid (PABA) is the active ingredient in many sunscreens and may be responsible for a photosensitivity rash in persons taking certain medications. It should be discontinued if irritation or rash appears.

Non-PABA sunscreens are also available, which give reliable protection and fewer reactions in persons taking medication. Whether PABA or non-PABA sunscreens are used, the best protection will be derived from those with Sun Protection Factors (SPF) of 15 and above. The SPF number represents the amount of protection above one's natural protection. For example, SPF 24 provides 24 times your natural sun protection and may help reduce the chance of premature aging, wrinkling, and skin cancer caused by overexposure to the sun. Repeated applications during prolonged sun exposure are recommended.

Ethics Issue

General Dynamics Standards of Business Ethics and Conduct clearly states, "Under no circumstances can we compromise our integrity by accepting gifts, however small, from vendors. Receiving or soliciting gifts, entertainment, or anything else of value, therefore, is expressly prohibited."

When attending a supplier conference, visiting a subcontractor, etc., General Dynamics employees must make arrangements to pay for their own refreshments and meals. Arrangements should be made for payment before the event. Your Ethics Program office has form letters for employees to send to suppliers explaining the company's policies on this subject.

Employment

For the week ending August 14, Convair Division employment was 9,100; Space Systems Division employment was 2,898.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Cal Samuels, 39955, or send them to MZ 11-1330.
Managing Editor: Cal Samuels
Production Editor: Bob Trometter
Design/Layout: Lorri Maida
Compositor: Dianna Rich

ILS Employee of the Month

As Employee of the Month, Pamela Sievers represents Convair's Integrated Logistic Support (ILS) Technical Publications Department for her extraordinary efforts as 1987 Savings Bond Drive ILS Coordinator. Pamela performed the coordination functions for the Drive between all ILS departments and with personnel at division and staff-level, while continuing to maintain sustained, outstanding performance in her assigned duties. Sievers was recognized for her dedication and team spirit on behalf of ILS and Technical Publications.

Corporate Battle

On Saturday, July 25, the four local General Dynamics divisions competed against each other in a preliminary version of the San Diego Corporate Battle. Convair, Space Systems, Electronics, and Data Systems divisions each entered 20 employees who participated in eight hours of sporting events held at San Diego State University.

Although all divisional teams volleyed the lead, Convair claimed the victory with 565 points. Space Systems followed with 530. Data Systems took third with 525, followed by Electronics with 505.

Events included a 5K run, 60-yard dash, "Beach Bum Relay," obstacle course, 50-yard freestyle, "Surfin' USA," tug-of-war, volleyball, and more.

The divisional sports battle was created as a fun tool to select top performers from all divisions who will represent the CRA General Dynamics team in the San Diego Corporate Battle on September 26. In last year's event, our General Dynamics team placed fourth. This year, come cheer your team to a first-place victory in San Diego, which leads to participation in the National Corporate Battle held in November in Orlando, Florida.

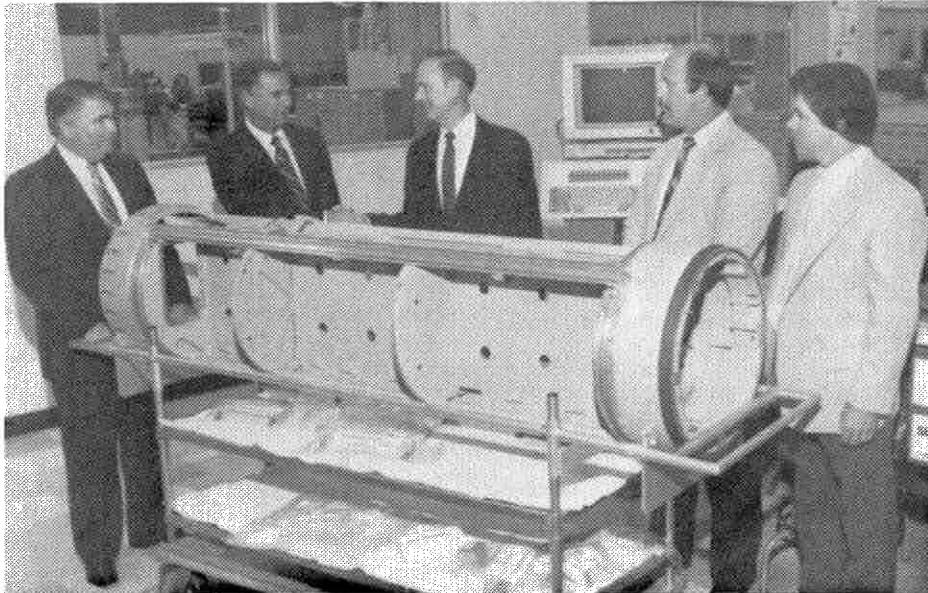
CONVAIR

WEEKLY LOG

August 31, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Exchanging congratulations over the first production BGM-109D are, from left, Bruce Ganoe, Larry Goza - Abilene director of Manufacturing Operations, Ben Wier - director of AUR Production, Tom Steward - Abilene Manufacturing manager, and Ron Devin - BGM-109D item manager.

BGM-109D Transitions to Production

The Tomahawk submunitions-dispensing variant, BGM-109D, recently achieved a major milestone when the first production article reached the final assembly area at Kearny Mesa. Marking the transition from development to production, this first contracted production vehicle is in work and on time for the FY86 buy schedule.

In both development and production, the General Dynamics Abilene, Texas, facility

has machined the 109D body section casting to its flight configuration. Bruce Ganoe, director of All-Up-Round Development, said, "The significance of this first article is that it represents a cooperative effort between Convair and Abilene to meet intensive design, development, and production requirements. Abilene has provided us with on-time, quality hardware."

Convair will be competing for a forecasted 1,100 BGM-109D missiles in future production, accounting for a major portion of all cruise missile procurement.

Tomahawk Makes Two More Successful Test Flights

A Tomahawk submunitions-dispensing BGM-109D variant (T-187) was successfully launched from the USS *Arkansas* (CGN-41) on August 25 off the coast of southern California. The missile transitioned to cruise flight, then flew the inland route to the Naval Weapons Center-China Lake test range, where it successfully performed submunitions dispensing events on three separate targets. The missile then attacked a fourth target by performing a terminal dive maneuver. Preliminary review of the test data indicates that all objectives were accomplished.

Congratulations to the Tomahawk team for their continued successes.



These kids enjoyed the camp made possible through Con-Trib.

Con-Trib Supports Children's Workshop

In addition to the vital support that our Employees' Con-Trib Club provides to United Way and the Emergency Aid Fund, other independent agencies also receive financial assistance. One such agency is the Children's Workshop.

Children's Workshop is an independent, nonprofit organization that serves children with learning and developmental disabilities. It provides sensory-motor therapy, speech and language therapy, special education, social work, and family counseling.

Con-Trib Club has helped fund various needs for this agency since 1975. For the past three years, we have funded their Camp Able — an aquatic camp held at the base of the Silver Strand. From June to September, California designates this area for use by the handicapped only.

This year, Con-Trib's donation made it possible for Children's Workshop to send 70 children to Camp Able for canoeing, sailing, swimming, and other water sports. In appreciation, Adele Neves, Director of Development for Children's Workshop, sent a letter to Con-Trib stating, "Thank you very much for such a successful time at Camp Able this year. We were able to bring 70 children to the camp for a full week of wonderful beach fun. Children's Workshop is very appreciative of your ongoing interest and support."

TOMAHAWK **BGM**
119

In another flight test on August 26, Tom-



Congratulations to the Space Systems Planning team. From left are Dick Hora, Jackie Ellis, Terry Banderas, Mike Gass, Mike Simon, Ted Johnston, and Vicki Kuick.

Planning Team Excels on Commercial Space Project

Several Space Systems members of the Planning & Administration department recently received Extraordinary Achievement Awards for their involvement in the commercial space program proposal which culminated in the corporation's decision to build 18 Atlas/Centaurs for the commercial market.

Over a five-month period, the group worked from the conception of commercialization through the final presentations to the General Dynamics Board of Directors in St. Louis.

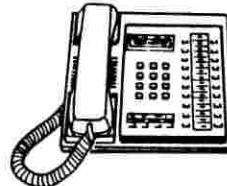
The team worked hard to gather information on the commercial space market and our competitors and to devise plans to minimize risk for production of commercial Atlas/Centaurs. According to Dick Hora, Planning director, "Five major presentations were involved over this five-month period. With help from the division's fledgling Graphic Services department, viewgraph presentations were prepared and presented at St. Louis, as well as a booklet which augmented the history of Atlas/Centaur and discussed the market needs and competition for commercial space launch vehicles."

As a result of these presentations, Chairman Stanley Pace strongly backed General Dynamics commitment to invest \$100 million toward building and marketing commercial Atlas/Centaurs. After the Corporation's go-ahead, the Space Systems Planning team compiled a 250-page book delineating details of the program.

"This team deserves recognition for the evenings and weekends given to the project. Much travel was required, and many last-minute deadlines were always met. They did an extraordinary job," said Hora.

New Telephone System to be Installed

A new telephone system will be installed at Convair and Space Systems divisions in mid-December. The new system will include current features and add to them, while saving almost \$1,000,000 per year. Departmental coordinators and alternates are currently being trained in preparation for the change. User classes will be held in the Fall. Progress reports and pertinent information on the new phone system will be made periodically in the *Weekly Log*. This is another action to help improve our competitiveness.



Last Presupervisor Course Begins in September

The last in the series of presupervisor training courses offered through the Community College begins on Thursday, September 10, in classroom 1, building 17, at Kearny Mesa. The class will meet on Mondays and Thursdays for eight weeks, ending the first week in November.

Dr. Leroy Brady, who created a highly favorable impression among his students in "Instructor Training for Supervisors," is returning by popular demand to teach "Labor-Management Relations for Supervisors." The course is designed to acquaint supervisors with the historical, legislative, and organizational significance of American trade unions. The studies include methods and techniques of grievance procedures, collective bargaining, negotiation, mediation, and arbitration.

Due to the Labor Day weekend, there will not be a *Weekly Log* published on September 7. Have a safe holiday, and don't forget to buckle up.

Employment

For the week ending August 21, Convair Division employment was 9,165; Space Systems Division employment was 2,911.

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Santa Maria Barbecue

The time is nearing for the Chuckwagon Gang from Vandenberg AFB to roll south to Missile Park for the annual Santa Maria Barbecue. The festive event, sponsored by Space Systems Division NMA and hosted by Bill Phillip, director of Atlas and Atlas/Centaur Programs, will begin at noon on Saturday, September 19.

Starting at noon, there will be games, rides, drawings, prizes, and entertainment. Dinner will be served from 3:00 to 5:00 p.m. (or until all are fed).

Dinner prices are \$7 for adults and \$2 for children under twelve. Tickets may be purchased from NMA boosters, but don't delay — only 1,600 are available.

For overnight RV camping, the northside gate will be open on Friday, September 18 at 6:00 a.m. through Sunday, September 20 at 8:00 p.m. It's free of charge and no reservations are necessary.

For further details, call Debbie Kania, 39895.

Parking Lot Reminder

Employees are reminded that from 3:30 to 5:00 p.m. the Kearny Mesa parking lot exits onto Kearny Villa Road are marked for one-way traffic flow and right or left turns only.

Please obey these directional markers for your safety and effective traffic flow.

Employee Survey Update

More Parking Lot Improvements

Parking lots 3 and 4 at Lindbergh Field have now been restriped, resulting in an additional 50 parking spaces. This action was a follow-on to the major restructuring of lot 11 which added 256 parking spaces and improved traffic flow.

CONVAIR

WEEKLY LOG

September 14, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

General Dynamics Sponsors National Public Television Program



In his brief reign as pontiff, from 1958 to 1963, Pope John XXIII became a beloved figure throughout the world among Catholics and non-Catholics alike. Yet there was more to this son of a peasant farmer than his gregarious warmth. Elected Pope at age 77, Angelo Roncalli was determined to throw open the doors of the Catholic church to both people and ideas.

Charles Durning will portray the Pope in the one-man show **I WOULD BE CALLED JOHN: POPE JOHN XXIII**, premiering on KPBS-TV *Wednesday, September 16 at 8 p.m.*, and on September 18 at noon.

I WOULD BE CALLED JOHN: POPE JOHN XXIII is made possible by funding from General Dynamics. This presentation marks the fourth in a series of one-man shows about leading 20th-century figures which General Dynamics has underwritten on public television. Previous broadcasts featured Robert Hardy as Winston Churchill, E.G. Marshall as Dwight Eisenhower, and Laurence Luckinbill as Lyndon Johnson.

Santa Maria Barbecue

The Vandenberg Chuckwagon crew begins hosting the Santa Marie Barbecue at noon Saturday, September 19, in Missile Park. Entrance to the park is free. All employees, families, and friends are welcome.

Dinner tickets are going fast for this annual event — \$7 for adults and \$2 for children under twelve. See a Space Systems NMA booster or call Sue Kopp, 77326, before it's too late.

The Right Mental Attitude

Bill McClelland is a structural test engineer for Convair's Aerotest Engineering at the Structures Lab on Harbor Drive. For the past four years, he has performed stress tests on various components of Atlas/Centaur, Tomahawk cruise missiles, and developmental products such as the Hypersonic Glide Vehicle. He has designed fixtures, conducted tests, and documented results.

Apart from his professional duties, McClelland is known by the community and a group of San Diego youth, not as an engineer, but as chairman and founder of the Youth Basketball Association (YBA).

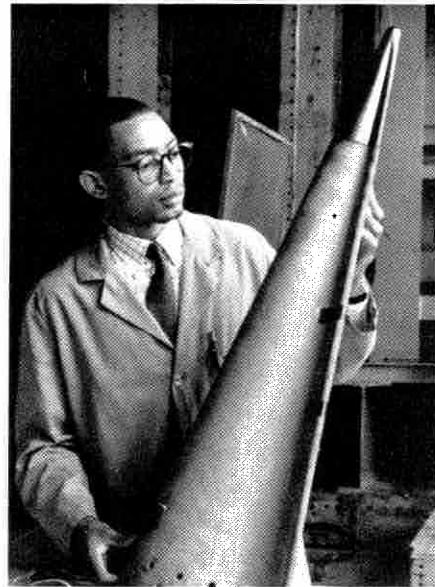
YBA is a basketball league that offers drug awareness and educational guidance, as well as basketball, to its members. The league, which represents ninth-grade basketball throughout San Diego County, has over 400 participants. Each student athlete knows the rules. Players are taught the fundamentals of basketball by qualified coaches, provided they maintain a minimum 2.0 grade point average. Those who fail to meet this requirement must attend league-sponsored tutoring sessions. The association also provides free drug-awareness seminars and operates a drug hotline. In addition, each student athlete is taught RMA (Right Mental Attitude) — the theme of the league.

How did it all begin? McClelland has always been a basketball fan and player, and he has always liked kids. For years he coached in a city basketball league, but he wasn't satisfied. He felt youth needed — deserved — more than basic instructions on how to dribble, pass, and shoot a basketball. He discussed the issue with some

friends, and together they found a solution — the RMA solution.

Creating the league wasn't easy. Because it is a corporation, a host of legal documents, procedures, and guidelines needed to be prepared. To McClelland, all the effort was worth it. "I was fortunate. When I was young, there were people who cared enough to direct me on the right path. Now it's my turn to care and give back to the community," McClelland said. "When a student athlete gets good grades while learning the game of basketball, I'm rewarded."

This season McClelland is expanding YBA to include an eighth-grade league, a fall varsity league, and two national tournaments.



Bill McClelland examines a test component at the Harbor Drive facility.

Last Session of Presupervisor Program

The last session of the Convair-specific class in the presupervisor series will be held on Wednesday, September 16. The class will be held at Kearny Mesa in building 17, classroom 1. The session will begin at 4:30 p.m. The speaker for this final session will be Dr. John Barrons, Ethics Program director.

The topics Barrons will address are the Employee Assistance Program and the Ethics Program. Both topics are of significant importance to anyone at Convair. They are of particular importance to any individual planning to make their career in Convair supervision.

NMACC Presents Michael Tuck

Channel 10 newscaster and commentator Michael Tuck will be the guest speaker at the September 18 National Management Association Convair Chapter dinner meeting.

The social hour starts at the Hanalei Hotel at 5:30 p.m., and the poolside luau begins at 6:30. The price is \$9.95 for NMA members and \$19.95 for nonmembers.

Human Resources is the sponsoring department, with Division Vice President George Roos as executive host. Once you have your tickets, please call 39566 for table reservations.



Members of the overtime committee are, from left, David Reismann (Valley Systems), Mark Wagner (Electric Boat), Steve Larkins (Valley Systems), Jim Bradley (Space Systems), John Barrons (Convair), Tom McKaig (Convair), Franz Hirschmann (Pomona), Ray Stoeser (Convair), and Helen Fife (DSD).

Employee Survey Update

Overtime Policy Examined

The July special edition of the *General Dynamics World* outlined actions being taken on issues which resulted from the Employee Survey. One of these issues concerned the all-hours-worked and overtime policies for salaried exempt employees.

John McSweeny, Convair general manager, organized a corporate-wide team to review the overtime policy and to recom-

mend changes or explain the rationale for maintaining present policies.

McSweeny recently hosted a two-day meeting with representatives from several divisions to discuss the overtime issues and to consider adding a category of compensatory time. The results from these meetings have been presented to other division general managers and corporate vice presidents, and a consolidated report will be presented to Chairman Stanley Pace within the next few weeks.

fully for Convair employees on long-term travel, and overseas assignments. The American Express cash advance option on ATM's is available at over 80,000 ATM's worldwide.

In addition, the company has arranged with California First Bank to have the ATM allow applicable bank activity for California First Bank, Star Systems, and other identified banking systems. Both the Point Loma and Kearny Mesa credit unions' cash cards are valid on this ATM, as well as those of many other banking institutions.

Employees of all divisions are allowed to use the ATM's; however, good judgement should be exercised regarding personal use during working hours.

The use of the ATM's for cash advances will increase the ability of the company traveler to obtain cash for business travel anywhere the employee is located. Additionally, the convenience of having the ATM's onsite will certainly be a benefit to many employees who utilize cash-card services at their bank or credit union.

The onsite ATM's will not accept deposits — only cash withdrawals. Operating instructions will be available at the ATM's.

For those Convair travelers wanting applications for the American Express card and the cash advance feature, please contact Convair Travel Audit, 24626.



Rae Baum operates the ATM at Kearny Mesa.

Convair Installing ATM's

Convair's Accounting Department has arranged to have two Automatic Teller Machines (ATM) installed in the GD San Diego facilities. One will be located at Kearny Mesa, in the main lobby of building 2. The second ATM will be located at Lindbergh Field, next to the cashier's office, building 1, old mezzanine, southeast end.

The primary purpose of the ATM's is for travel advances for those Convair employees eligible to have American Express cards. This service has been used success-

July Retirees

Thanks and best wishes for a happy retirement to these employees who retired in July:

Name (Classification)	Years of Service
Raymond Appel Logistics Administrator	30
Frank Applegate Program Control Specialist	37
Pete Autio Senior Photographic Specialist	29
Theodore Bianchi Engineering Specialist	28
Mary Bridger Executive Secretary	31
Robert Brown Facilities Engineer	14
Leo Buss Project Engineer	30
Stan Chamberlain Program QA Manager	36
Alvin Davis Stock Clerk A	37
Harry Dempster Engineering Specialist	29
William Eaton Project Engineer	30
Earl Franklin Machinist-Support Operations	15
Robert Newak Programmer/Analyst	16
Lonnie Jordan Sr. QA Specialist	31
Samuel Kelley Operations Supervisor	34
Craig Lent Material Project Analyst	38
Carter Ratliff, Jr. Inspector - Receiving	6

Cordell to Address AIAA

Convair and Space Systems divisions provide speakers for various organizations, schools, and societies almost on a weekly basis. Our people go to schools, professional society functions, club meetings, and more, to share their knowledge and experience in the many areas of aviation and aerospace industries.

On September 23, Space Systems' Bruce Cordell will address the Orange County Section of the American Institute of Aeronautics and Astronautics (AIAA). Cordell, an experienced speaker and author of many space-related papers, will present an overview of Mars exploration and colonization.

If you would like more information on the meeting, call Bruce Cordell at 77173.

W-4 Reminder

The cutoff date for submitting new W-4s is October 1, 1987.

Employment

For the week ending September 4, Convair Division employment was 8,508; Space Systems Division employment was 2,931.

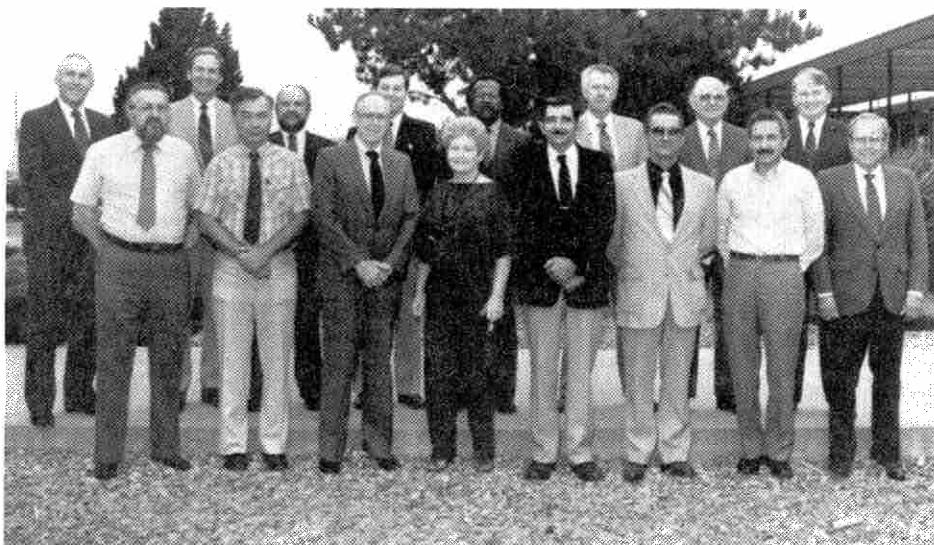
CONVAIR

WEEKLY LOG

September 21, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



At a recent Service Awards Breakfast the following Convair employees were honored for their years of service. Front row: Russ Hamilton, 35 years, George Perkins, 35 years, Mel Clayton, 35 years, Polly Brown, 35 years, Joe Schimka, 35 years, Chuck Backus, 35 years, Si Robles, 35 years, Rudy Molina, staff. Second row: John McSweeny, general manager, Ray Beuligmann, staff, Vic Echevarria, 35 years, Art Veitch, staff, Shelley White, 35 years, Tom Hughes, 45 years, George Felton, 40 years, and Ken Lake, staff.

Key HGV Technology Contract Won

Convair was recently awarded the Carbon-Carbon Primary Structure Development Program by the Air Force Wright-Aeronautical Laboratory (AFWAL). This \$3.6 million, four-phased effort will design and demonstrate a section of full-scale hardware using advanced carbon-carbon materials for hypersonic vehicles.

This new contract will give Convair the ability to develop technology for future hypersonic vehicles such as the National Aerospace Plane, hypersonic aircraft, and Hypersonic Glide Vehicles (HGV).

Batting 1,000 With Your Suggestions

As a special promotion, Convair's Employee Suggestion Program is offering you the opportunity to receive baseball tickets absolutely free. The first forty suggesters whose ideas reach our office beginning today through Friday will win a pair of tickets to see the Giants take on the Padres. The game starts at 7:00 p.m. on Monday, September 28. All winners will be called daily so you can make your plans to attend early. Don't wait. Mail your suggestion to 33-1320 today and let your good idea take you to the ballgame.

COLLARS To Go On-Line At Plant 19

Convair and Space Systems will be implementing the new on-line labor and attendance reporting system (COLLARS) at Plant 19 on Monday, September 28th.

COLLARS automates attendance reporting procedures for all Convair and Space Systems hourly employees. Additionally, there have been improvements to the current automated labor transactions.

The project team and Labor Accounting department are currently training supervisors and employees at Plant 19. Full production implementation of the system will occur October 26 for all remaining San Diego sites.

For further details and information, contact Gail Turner or Lynn Bonertz (Convair), 27792, or Brian Brown (Space), 77805.

Blood Drive — Your Chance to Give the Gift of Life

Convair, Space Systems & DSD-Western Center Blood Drive Will be Held October 19-23

Reservation Details Will be Provided in the Next Weekly Log

Convair to Host ISPA

The newly chartered San Diego chapter of the International Society of Parametric Analysts (ISPA) will meet in Kearny Mesa's building 2, Presentation Room at 5:00 p.m., Wednesday, September 23. Michael Simon, Space Systems' Business Planning administrator, will present "Putting NASA and America Back in Space." The first slate of officers will also be elected at this initial meeting.

Simon, author of *Keeping the Dream Alive — Putting NASA and America Back in Space*, will provide an update on the nation's future in manned space flight. He will discuss such key issues as America's next-generation space transportation system; the status of NASA's space station project; how to avoid the mistakes of the Shuttle program in developing these new space systems; space commercialization; and our long-term prospects for large-scale industrialization and exploration.

If you are interested in attending this highly informative session, please call Jim Fox, 75291.

New Composites Freezer Installed at LF

Convair recently completed installation of a 15,000 cubic-foot freezer in support of the Composite Manufacturing Facility in building 3, Lindbergh Field. The freezer has the capability to store rolls of composite lay-up material at temperatures of -10 to 0 degrees Fahrenheit.

Installation of this facility has allowed Production Control to consolidate their inventory from the equivalent of 13 freezers into one, allowing for better inventory control as well as shelf-life consideration.

A&E Spells Relief

It's a Monday morning and your boss has just given you a tough assignment: first, create a display that describes what your department does and how it operates. Secondly, produce a 30-minute viewgraph presentation with a few lighthearted cartoons and absolutely no handwritten charts. Finally, write a ten-page paper, complete with text and figures, for submittal to an important technical symposium.

Ready to faint? Or worse? Well, before you're ready to give up, consider that help is just a phone call or short walk away.

That's right. The Art & Editorial Department, located in Kearny Mesa's building 3, first floor, has been helping people

(con't on next page)

accomplish such tasks for 42 years. Although the majority of A&E's tasks are performed for Space Systems and Convair employees, the group has also done work for our Corporate office and other divisions within General Dynamics.

"We're here to help," says Bud Smith, Art & Editorial manager. "The work is both challenging and hectic, but we will assist all who require our services."

In order to maximize efficiency, A&E's staff includes artists and editors who are design, presentation, and proposal experts. Smith believes that this type of specialized structure helps produce the best possible product.

Of course, a difficult constraint to overcome is time. Time to think about the project, write down ideas, and submit rough input to A&E. But there's no need to feel isolated during the creative process.

"We encourage requestors to talk to us before their input is complete, especially if they're having problems," says Smith. "It gives us the opportunity to know what the project's about, who the audience is, when it's due, and our own organizational time to produce the task in the most cost-effective manner.

"We know what works and what doesn't. If a person is stuck we can offer suggestions and solutions. That kind of interaction saves a tremendous amount of time and money. Anything we can do to get adequate lead time is a plus."

Generally, according to Smith, three-to-five working days is enough cushion to produce a 30-piece viewgraph presentation made up of simple word charts and graphs.

However, it may take several weeks to create a 150-page proposal or complex design effort. The people in A&E also know that our complex work environment creates a need for rush jobs.

It's not uncommon for a Friday afternoon to be shattered by a request for work needed by Monday morning. Weekend work and all-nighters are certainly not the norm, but they do occur.

Says Smith, "It can be a tough place to work, but the bottom line is, we're here to service the needs of the division. The people in A&E are dedicated to doing just that."

Property Pass Notice

Employees are reminded that the old Property Passes (Form 5100, Rev. 8-84) will not be accepted after September 30. The new Property Passes (Form 4-87) must be used starting October 1.



Convair Assembly Planning Class Graduates. These members of Manufacturing Engineering recently completed 240 hours of classroom training and six weeks of hands-on experience. From left are (seated) Jan Clark, Bernadette Stubblefield, Kathy Eubank, Lori Huffman, Nancy Birmingham, and Mike Johnson. (Standing) instructors Larry Ayers, Chris Anderson, Dan Bain, and Sue Adamov; Juan Esqueda, Jeff Washburn, John Hom, Tony Anthony, Vallie Carpenter, Kathy Bower, and Bob Hollingsworth (instructor). Not available for photo were Rick Smith, John Pursglove, Bryan Fields, and Jim Theissen. Congratulations to the Assembly Planning graduates.

CRA Presents Swiftest Business



Once again it's time for all of our fleet-footed (and not so fleet-footed) joggers, walkers, and crawlers to sign up for the General Dynamics CRA-sponsored Swiftest Business in San Diego 10K race and two-mile fun run.

The event is scheduled for 8:00 a.m. on Sunday, October 25, and the race course will be mapped out around the Kearny Mesa plant. Teams consist of three to five members who compete in several different categories.

Last year General Dynamics brought home the Mayor's Cup, and we want to keep it here. But the competition will be stiff this year.

For more information on the Swiftest Business, call Barbara Mooney, 39921.

Speechcraft Program Starts New Session

The National Management Association Convair and Space Systems chapters are sponsoring a Speechcraft program through Toastmasters. The eight-week course in speaking skills will be held at CRA on Wednesdays (5:00 to 7:00 p.m.) from September 30 through November 18.

Over the years, Toastmasters has helped individuals build self-confidence, sharpen their public-speaking and presentation skills, and learn how to organize their ideas in a logical, coherent manner.

For more information on Speechcraft, please call Richard Hammett, 74854.

Southern California Extravaganza

Padres, Dodgers, and the Beachboys

On Sunday, October 4, at Jack Murphy Stadium, the San Diego Padres take on the Los Angeles Dodgers at 1:05 p.m. After the game, the Beachboys will present a concert with their popular Southern California music.

The Convair Recreation Association has 100 loge-level tickets available for \$9.50 each. This will be an event you won't want to miss, so hurry and purchase your tickets.

Employment

For the week ending September 11, Convair Division employment was 8,367; Space Systems Division employment was 2,916.

CONVAIR

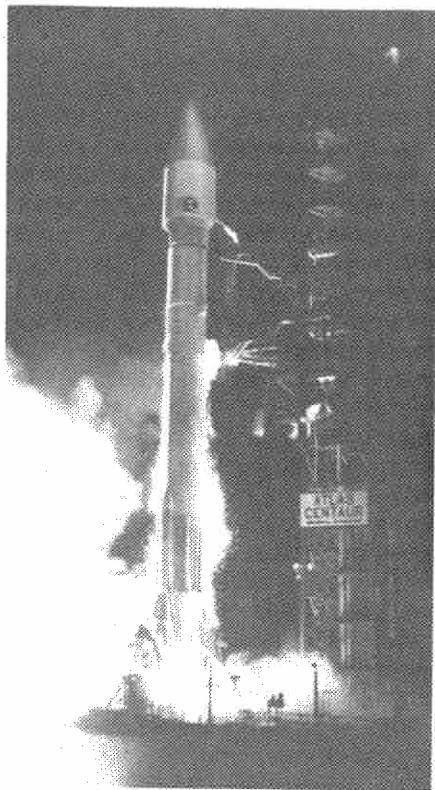
WEEKLY LOG

September 28, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Space Systems' First Commercial Launch Services Sale



Space Systems' Atlas/Centaur has been selected by the Board of Signatories of the European Telecommunications Satellite Organization (EUTELSAT) to launch a EUTELSAT II communications satellite in 1990. The order also includes options for up to two additional launches.

In making the announcement, Andrea Caruso, Director General of EUTELSAT, said, "The Atlas/Centaur was chosen as a second source of launch services in addition to Ariane because it met all of our major launch requirements to place on orbit satellites of our second-generation, EUTELSAT

II." Key to the decision, he said, was cost, schedule flexibility, and reliability of the launch vehicle.

Dr. Alan M. Lovelace, General Manager of the General Dynamics Space Systems Division, said, "We are extremely proud of the fact that our Atlas/Centaur was selected for these important missions that will enhance international telecommunications between member countries of the EUTELSAT organization. The order from EUTELSAT is a significant action that reinforces our commitment to be a leader in the commercial launch services marketplace."

A contract signing ceremony between General Dynamics and EUTELSAT will take place next month in Geneva, Switzerland, during the Telecom '87 Conference.

The EUTELSAT order is the first firm contract for General Dynamics since announcing its intention in June to build 18 Atlas/Centaurs for the commercial launch services market. In addition, the company has received several reservations for launch services from other customers. Under the program, Space Systems Division is offering a comprehensive launch services package to commercial and government customers worldwide.

The European communications satellite will be launched from Cape Canaveral. All facilities, services, and arrangements required for spacecraft processing and launch are provided by General Dynamics under a single launch services contract. The EUTELSAT II launch is scheduled for early 1990. To accommodate the spacecraft, the Atlas/Centaur will be configured with a new four-meter payload fairing.

Congratulations to the Atlas/Centaur commercial space team.

and answering questions on the new system.

For questions or more information, contact the COLLARS Project Team office in building 2, column B-19, or call Lynn Bonertz or Gail Turner at 27792 (Convair), or Brian Brown at 77805 (Space Systems).

Full implementation of the system is planned for October 26 at remaining San Diego sites. Training for supervisors and employees begins September 29. For information on the training schedule call Labor Accounting at 27524.

Plant 19 Now On New COLLARS

Plant 19 is now in its first week on COLLARS (Convair On-Line Labor and Attendance Reporting System) as part of the final testing of the new system. COLLARS has on-line attendance reporting procedures for all hourly Convair and Space employees. Also, automated labor transactions have been improved under the new system for departments charging to COLLARS.

Representatives from the project team and the Labor Accounting department will be at Plant 19 throughout the week assisting

Space Systems Wins Important NASA Study Contract

Space Systems was selected as one of two companies to conduct a systems study of Liquid Rocket Boosters (LRBs) for the Space Transportation System. NASA's Marshall Space Flight Center (MSFC) officially announced their decision last week. LRBs may one day replace the solid boosters currently used in the space shuttle system. Once developed, they might also be used to boost other future launch vehicles, such as Shuttle C (an unmanned cargo-delivery version of the Shuttle) or ALS (the next Air Force advanced launch system vehicle now under study at Space Systems).

Within the \$3 million study various propellant combinations, engine systems, and recovery options will be examined to determine which concepts are most feasible and cost effective. Important considerations are systems safety, performance, and compatibility with the present Space Transportation System and its launch facilities.

While MSFC is NASA's lead center, the Johnson Space Center, Kennedy Space Center, and Langley Research Center will all participate in the program and interface with the prime contractors.

According to Space Systems General Manager Alan Lovelace, "This is a significant win for the Division because it presents General Dynamics with the opportunity to capture a prime share of NASA Shuttle business through the next decade." In recognition of the importance of this program to both General Dynamics and NASA, we will be performing the majority of the study in our new Huntsville, Alabama facility, which is adjacent to MSFC. We are now in the process of staffing that office, where we expect continued expansion as this and other programs mature.

This win is the culmination of a very intense competition. Congratulations to our Space Systems proposal team.

Small Business Programs Rated Outstanding

For the fourth consecutive year, Convair's Small Business programs have received an outstanding rating from the government compliance review conducted by representatives of the Small Business Administration (SBA) and the Defense Contract Administration Service Management Area (DCASMA). Congratulations to the Procurement group.

NEO Returns to Weekly Sessions

Beginning Oct. 5 New Employee Orientation (NEO) will be held weekly. All salaried employees, regardless of plant location, and hourly employees assigned to Kearny Mesa should arrange with their supervisor to attend a session on Mondays from 8 a.m. to noon in building 17, room 1.

Hourly new hires assigned to Lindbergh Field and Plant 19 will meet on Fridays beginning Oct. 9, 8-11 a.m. in building 14's auditorium. You should also plan to attend the three-hour hazardous waste materials overview following NEO at both locations.

If you have questions please call Kearny Mesa, 39955, or Lindbergh Field, 22362.

Ethics Responsibility

All supervisors are encouraged to review their ethics responsibilities as outlined on page 5 of the General Dynamics Standards of Business Ethics and Conduct (blue book). One of these responsibilities is: "Maintain a workplace environment that encourages frank and open communications regarding the importance of operating under such principles."

Time Card Reminder

Employees are reminded that all hours worked must be recorded on your time cards.

Fire Safety Equipment Available For Home Use

National Fire Prevention Week is Oct. 4-10. This annual event serves to remind us of the importance of fire prevention. In recognition of this event, the Fire Departments at Sycamore Canyon, Lindbergh Field, and Kearny Mesa plants will be selling fire safety equipment at discounted prices next week. Extinguishers, life ladders, combustible liquid safety containers, smoke detectors, and self-illuminating safety lights will be available at all three locations. Stop in at any one of the stations to purchase these items and pick up some free fire safety literature.

SSD Promo Items on Sale

The Convair Recreation Association is offering Space Systems Division promotional items for sale. These items include coffee mugs, posters, and jackets celebrating the 25th anniversary of John Glenn's epochal Atlas/Mercury flight. Jackets will be on display for you to select and order sizes until October 23.

For more information call Yolanda Mendoza, 78561.

Walk, Don't Run

If your legs were made for walking and not running, you can still join the festivities at the CRA-sponsored Swiftest Business 10K race on Oct. 25.

This year a two-mile fun run/walk is added to the event for individual participation. Awards for first-place finishers will be given at the awards ceremony.

Following the race is a health fair and refreshments featuring a Sunday buffet brunch. Proceeds will benefit the Friends of Balboa Stadium, an organization dedicated to the restoration of San Diego's Balboa Stadium.

Registration deadline is Oct. 16. To sign up, contact Barbara Mooney at 39921.

If you'd like to catch a glimpse of last year's event, the National Management Association invites you to see a video during your lunch time in the cafeteria at one of the following locations.

Kearny Mesa

Tuesday, Sept. 29 and Oct. 6

Lindbergh Field

Wednesday, Sept. 30 and Oct. 7

Viewpoint Plaza

Thursday, Oct. 1 and Oct. 8

Our Con-Trib Dollars Are Working

Thanks to our support of GD's Con-Trib Club, Poway Valley Senior Citizens Inc. was able to build new facilities to provide programs and community services for approximately 4,000 senior citizens from Poway, Rancho Bernardo, and Rancho Penasquitos.

The center serves 100 meals a day and delivers meals seven days a week to the homebound. Transportation is provided to take citizens to the doctor, dentist, grocery store, and shopping.

The center also houses a gift shop and provides social activities and exercise instruction. Legal assistance, property and rental rebates, and an outreach program are also offered.

For more information on how your contributions to the Con-Trib Club assist the community, contact Susan Norris at 28250.

Last Chance for Offset Vacation

General Dynamics employees will have the last opportunity to take advantage of the Offset Vacation Program from December 29, 1987 to January 4, 1988.

For \$905 (includes \$50 discount) you can travel to Hong Kong, stay at the Lee Gardens Hotel, tour the city, enjoy the fantastic shopping opportunities, and much more.

For information about the travel package please call Laurie, 77859.



Rick Burney (left) receives a journeyman certificate from Mike Holmes, manager, Manufacturing Engineering, for completing a four-year apprenticeship program that included 8,000 hours of job training. Rick has also met the requirements for an associate degree in manufacturing technology and tool planning.

W-4 Reminder

The cutoff date for submitting new W-4s is October 1, 1987.

Cutting Our "Overhead"

Occupants and visitors of Kearny Mesa's building 4 have noticed that the hallway ceilings are being replaced. This Plant Services project will provide cable trays for new communications systems and will result in the installation of new energy-efficient light fixtures.

Bulletin Board

NMA Space Systems chapter is sponsoring a three-hour seminar, "First-Time Home Buying — A Workshop for Success," on Thursday, Oct. 1, 4:30-7:30 p.m. Judy Reed, vice president, Imperial Savings will conduct the seminar. For reservations, contact Catherine Gomezplata at 78479.

Employment

For the week ending September 18, Convair Division employment was 8,425; Space Systems Division employment was 2,899.

Thanks, Cal

For two years the *Weekly Log* has been in the capable hands of managing editor Cal Samuels. With this issue Cal has entrusted his "baby" to the hands of others and accepted a position in Management Development.

Thanks Cal, for your dedication and expertise in bringing the news for and about Convair and Space Systems to your fellow coworkers.

Good luck.

CONVAIR

WEEKLY LOG

October 5, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions



Sycamore Canyon Tomahawk Team Commended

Convair general manager John McSweeny recently presented Rule One jackets to the Sycamore Canyon Tomahawk team in appreciation of the improved quality of the missiles tested at the facility — 31 out of 33 successful Rule Ones (a warheading operation performed by the users of the AUR).

McSweeny commented that this kind of

dedicated activity would help win a larger percentage of the production award set aside each fiscal year for the Tomahawk top quality producer.

Ed Squires, vice president of Cruise Missile Operations, commended the team for their ability to meet difficult deadlines.

DIS Inspection Begins October 19

With the upcoming Defense Investigative Services inspection, employees are reminded that possessing cameras and undeveloped photographic film within General Dynamics' facilities is limited and confined to designated, authorized personnel. If you have undeveloped film in your possession, please drop it in one of the CRA film drops conveniently located at the plant entrances.

Also prohibited on company property are recording instruments and radios, such as cassette players, headphone radios, playback-only cassette players, and compact disk players. Company-owned equipment used in company business are covered by Chapter 18 of the Convair Security Manual.

If you notice unauthorized use of such equipment, please report it to Industrial Security at 38417.

NewsBriefs at Convair

VHSIC Contract Awarded. Convair has been selected to develop the Combat Vehicle VHSIC Integrated System by the Army's Picatinny Arsenal. Phase One of this award is for \$675,000.

Cogeneration Plant Savings Exceed \$1 Million. The Lindbergh Field Cogeneration Plant has been on-line, producing electricity 97.2 percent of the time, since the beginning of 1987. Approximately 32 percent of Lindbergh Field's electrical requirements and essentially all steam requirements have been internally generated. Convair's 1987 utility bill has been reduced by \$1,248,714 to date.

Convair Passes 1987 Property System Survey. Convair was notified by DCAS that its Government Property Control System was approved, based on results of its annual Property Systems Survey.

Artificial Intelligence Application Developed at Convair

After two years of hard work and painstaking research, our Logistics Planning and Technology Development department has developed software that enables computers to "think."

Chief Mary Klement, and principal investigator Mike Darmody, directed the independent research and development project called AI System for Material Selection.

The AI (Artificial Intelligence) system is an expert computer program that emulates the decisions of a human. Though not to be confused with the "HAL 2000" computer of "2001—A Space Odessy" fame, the system will assist engineers in selecting adhesives for both metal and composite structures. The system includes rules for temperature and bonding strength. It also has supportability features such as repair in the field. The system was developed using a commercially available software package called the Automated Reasoning Tool run on Symbolics 3640, the computer hardware.

The prototype system has been linked to a VAX 11/780 with terminals available to the Material and Processes Engineering group for direct selection. Next year, the system will be expanded to select adhesives for composite repair. The program supports the government's Unified Life Cycle Engineering goal of including manufacturing and support considerations during the design process.

Mike's work has been published in a book – titled *Artificial Intelligence Applications in Material Sciences* by the Metallurgical Society of the American Institute of Mining and Metallurgical Engineers. He also made presentations at the 1987 Computer-Aided Logistics Support Conference in Washington, D.C. and at the 1987 Conference of Expert Systems in Government.

Ethics Hotline Numbers

Convair	38120
Space Systems	38367



St. Vincent De Paul Celebrates Opening of New Center. The St. Vincent De Paul – Joan Kroc Center recently celebrated its grand opening with a gala fiesta. Among those attending the ceremonies were (standing, left to right): general manager John McSweeny, his wife, Jeannette, and Father Joe Carroll, the Center's administrator. Seated are (left to right): Percy Myers (Electronics Division) and Brenda Harris, Dennis Bartlett (Space Systems) and wife, Lynn, and Cush Dow (Convair) with his wife, Betty. St. Vincent De Paul is one of the many community service organizations supported by General Dynamics' San Diego divisions and employees.



It's National Fire Prevention Week. Convair firefighters practice fire prevention not only during National Fire Prevention Week, but throughout the year. Firefighters Dave Nichols (left) and Mitch Kinnaman are shown here in a training session fighting fuel fires. Lt. David Watson, crew leader, is directing the operations.

The Life You Save . . .

Cardiopulmonary Resuscitation (CPR) courses will be offered to General Dynamics employees on the first Monday and Wednesday of each month beginning tonight. Convair firefighter Chris Galindo will be instructing the two-session course. Upon completion, a certification in CPR from the American Red Cross will be granted. Classes will be held in the Kearny Mesa cafeteria, 5–9 p.m. There is an \$8.50 fee per person and enrollment is limited to 15 people. To register for the course, contact Chris at 73100.

DSD Hosts Third Annual Software Technology Conference

"Diagnostic Applications of Expert Systems" is the title of David King's presentation for General Dynamics' third annual Software Technology Conference scheduled for October 8, noon to 1:30 p.m. in building 77's MIC room. King is the author of the book *Expert Systems*. Seating is limited, so if you'd like to attend, contact Lezah Stirling at 33755. For additional information about the conference, call the chairperson, Mary Meinen, at 33817.

16 Employees Equal 451 Years of Service

Best wishes are extended for a happy retirement to these August retirees.

Name (Classification)	Years of Service
Otis J. Bazoon	
Group Leader – LGMA	37
Benno V. Bodnieks	
Senior Engineer	16
Willard C. Buxton	
Manager, Procurement	26
William E. Carriker	
Jig & Fixtures Builder	35
Arleigh J. Dagenais	
Senior Engineer	16
A.Z. Eiland	
Logistics Specialist	8
James E. Garrett	
Group Leader – LGMA	32
James L. Hopkins	
Spar Cap Mill Operator	34
Roy Horn	
Router Operator	34
Gustav D. Magnuson	
Engineering Specialist	19
Sheldon B. Silva	
Environmental Control Tech	29
James V. Smith	
Metal Fitter/Tank Fabricator	31
Sibyl L. Streeper	
Accountant	31
Dale L. Turner	
Quality Assurance Specialist	36
Harold E. Wilson	
Financial Supervisor	35
William K. Woods	
Industrial Photographer	32

Employee Survey Update

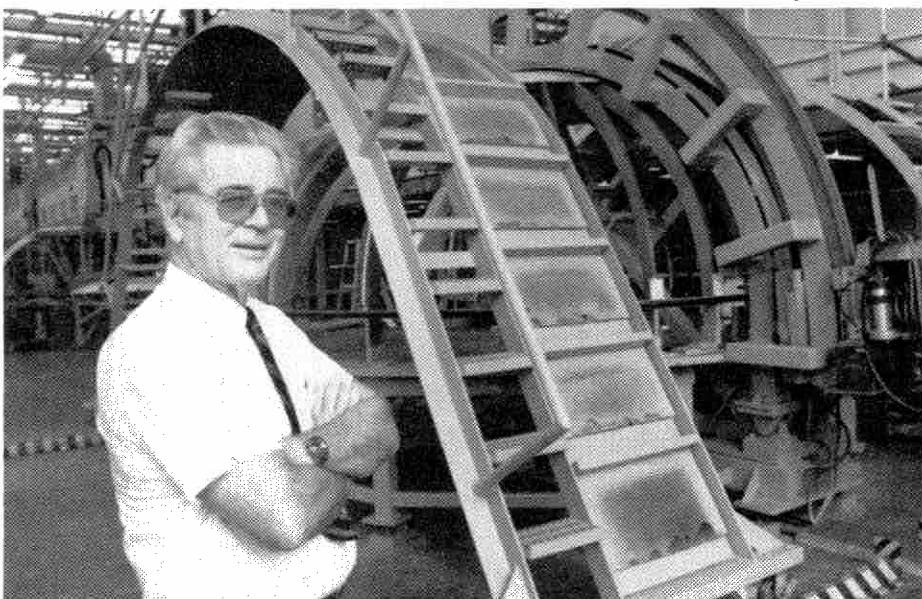
What are we doing? What have we done? Employee survey action is taking place. For example, our Integrated Logistics Support department raised questions about the company's merit review system. In an attempt to clear up any misunderstandings, an all-hands meeting was called to explain the process.

Results from a departmental mini-survey revealed that after one meeting, there was greater comprehension of the way the system works. Other departments are addressing their issues in a similar fashion. Watch for a special edition of the *Weekly Log* coming this month dedicated to Convair's Employee Survey feedback activities.

Weekly Log Deadline

If you have items of interest or announcements you'd like to run in the *Weekly Log*, please submit the information by noon of the preceding Tuesday to MZ 11-1330.

Robert E. Bruce Celebrates 50 Years With General Dynamics



During Robert Bruce's 50-year career with General Dynamics, he has had the opportunity to fill many assignments, such as the development of manufacturing procedures for this bulkhead welding fixture.

by Carol Aguilar

Reminiscing about a 50-year career with General Dynamics brings to mind many projects, people, and ideas that had been temporarily forgotten amidst current days' assignments and deadlines.

Robert Bruce, manufacturing engineer, Space Systems, began his career at Consolidated Aircraft the day after he graduated from San Diego's Hoover High School in 1936. Listening to Bob's stories about the assignments he has undertaken, the departments he has worked in, and the variety of job titles he has held is like having a living history lesson of the development of Consolidated Aircraft, Consolidated Vultee Aircraft, Astronautics, Convair, and finally, Space Systems Division.

Bob came to work on the burr bench in the Tank Assembly department of the PBY program for \$.40 an hour. He rapidly learned other areas of manufacturing and machining, but became an expert in resistance and fusion welding. His association with welding and with the tank assembly function has not deviated much during his tenure. The tanks he has worked on went into B24s in 1940; the model 110 aircraft, which later became the successful 240 in 1945; the Terrier missile in 1948; and beginning in 1956, the Atlas/Centaur, followed by the Shuttle/Centaur and Titan/Centaur rockets.

The types of tank may have changed, but Bob Bruce's involvement and expertise have remained throughout. Bob has excelled as leadman, supervisor, foreman, industrial engineer, tool engineer, and manufacturing engineer.

While acting as foreman on the B24 pro-

gram during World War II, Bob gained the nickname "professor." He was actively involved with a project called Job Instructional Training (JIT). Women, who had been homemakers and mothers or who had not yet entered the work force, were suddenly called into the factories to produce aircraft for military contracts. Bob's natural grasp of the manufacturing process and how to explain it to others was called upon to develop skills in these new employees.

During a period with the Terrier missile program as a process engineer, Bob was actively involved in setting up and controlling chemical processes. This involvement eventually took him to the new Pomona Division in 1950 when the Terrier missile program was moved there. Bob helped set up the processing lab, wrote new processing specifications, and successfully changed the manufacturing process to provide the missile corrosion protection for 100 hours of exposure to saltwater spray.

When Bob returned to San Diego in 1956, he began a long association with the Atlas missile program. He recalls being approached by an engineer from the experimental lab who asked him if he would be interested in working on a missile that would be 60 feet long and 10 feet in diameter. At that time, even the concept of such a missile seemed preposterous.

Since those early days, Bob's constantly inquiring mind has been responsible for many manufacturing innovations that have become standard procedures for the various vehicle launch programs. For example, the skate spotwelder was first used to modify the front end of the Atlas booster used for

the Mercury program that put America's first astronaut into space. The skate spotwelder is still used as a standard operation today.

Bob was involved in test component development during the initial buildup of the Centaur upper stage, including developing tooling for use with the thin skins. Other manufacturing processes that were developed or renovated during Bob's career are the use of vertical assembly of the payload shroud, first discussed during the Atlas E and F development, and the use of the simpler skin/stringer construction of payload fairings. He received Excel awards for his work on the SEASAT program and during the initial tooling phase of the Shuttle/Centaur program.

Today Bob Bruce works at Plant 19, interfacing with tool design, liaison planning, industrial engineering, producibility, design engineering, and estimating.

Viewing his career in retrospect, he feels a large responsibility to impart as much knowledge and experience as possible to the next generation of engineers. "I feel it is important to identify and train new people to continue the manufacturing and management process so the Division functions smoothly," he says.

Bob admits to judging other's work performance and decision-making by the standards he has established for himself. Those standards have included being responsible to management direction to produce products on schedule and within budget. The concept of "Do It Right the First Time" was a favorite of Bob's long before it was paraphrased as a company motto.

Although Bob Bruce's 50-year anniversary with the company is being observed, he is making no plans to retire in the foreseeable future. Congratulations and thank you Bob, for your years of dedication and service. And thank you for teaching others the "Do It Right The First Time" philosophy.

CRA Travel Offers Getaways

Would you like to spend Thanksgiving in Puerto Vallarta or cruise the Panama Canal in early December? It's not too late!

CRA travel is offering four nights at the Playa de Oro Hotel in Puerto Vallarta with departure on Wednesday, November 25. The package costs \$350 per person, based on double occupancy, including air fare.

The cruise aboard the Royal Princess departs from Acapulco on December 9, travels through the Panama Canal, and finishes in San Juan.

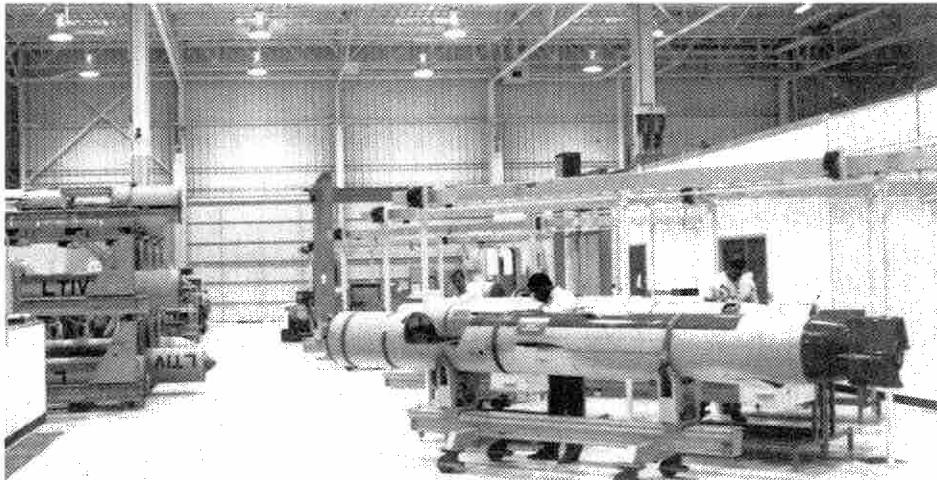
To book your spot, call CRA Travel at 38248 or stop by the office located at the CRA Clubhouse between 11 a.m. and 6 p.m. each workday.



DCASPRO Sounds Off

In a national event "Bells Across America," DCASPRO General Dynamics recently celebrated with a ringing tribute to the U.S. Constitution. On September 17 Capt. Christopher and some of his staff

rang bells for 200 seconds to recognize the 200th anniversary of the signing of the Constitution. It was also a good time to reflect on the blessings of liberty and the ideals of justice and equal opportunity.



The Tomahawk Flight Test Team enjoys their new facility located in Kearny Mesa's building 5, column A/D-11/13.

Flight Test Team, Where Are You?

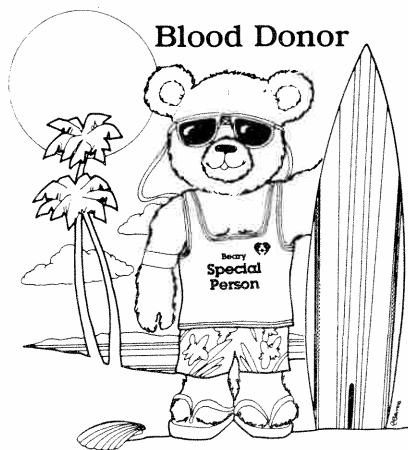
The Tomahawk Flight Test team, which prepares Tomahawk cruise missiles and various related launch systems for flight tests, has relocated.

The team has moved from the south end of Kearny Mesa's building 5 to a 12,500 square-foot facility at the north end of the same building. Adjacent to other cruise missile activities, the new facility boasts a well-lighted assembly area, a technicians' work area, a 2,100 square-foot environmentally controlled test equipment enclo-

sure, a secured work area and supporting office space and storage. The open area can accommodate five missiles in assembly, and four in test and checkout at the same time.

The test equipment enclosure houses a CMATS missile-level test set and test equipment that tests missiles while they are located outside of the enclosure on the open floor. An instrumentation and missile checkout trailer is located on the facility, as well as other equipment rotated between Kearny Mesa and various off-site proving grounds.

We're Looking for Beary Special Persons



San Diego Blood Bank

A County Wide Service



Did you know that . . .

- the San Diego Blood Bank supplies all hospitals in San Diego County with their blood needs?
- every seven minutes a person in San Diego requires a blood transfusion?
- General Dynamics is the largest private contributor in San Diego County?
- the General Dynamics blood drive starts October 19?

It's not too late to be a "Beary Special Person." Please call today to make an appointment to donate blood during GD's blood drive for Convair, Space Systems, and DSD-Western Center. Each donor will receive a Beary Special Person t-shirt at one of the following locations:

Kearny Mesa

Fire Station, Oct. 19 & 20, 8 a.m.-1 p.m.

Lindbergh Field

Fire Station, Oct. 21 & 22, 8 a.m.-1 p.m.

Plant 19

Bldg. 4 Trailer, Oct. 23, 8 a.m.-4:45 p.m.

Make your reservations by calling: Kearny Mesa — 73820, Lindbergh Field and Plant 19 — 28244.

Bulletin Board

In conjunction with the Convair/Don Diego Ski Club's Annual Swap Meet, NMA Space Systems will coordinate a 30-mile bicycle ride, beginning and ending at Missile Park on Saturday, October 17. For more details call Greg Jones at 77979.

Employment

For the week ending September 25, Convair Division employment was 8,402; Space Systems Division employment was 2,879.

CONVAIR

WEEKLY LOG

October 12, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

NewsBriefs at Convair and Space Systems

Expert System CRAD Awarded. Space Systems received the only award, worth \$465,000, from Air Force Wright Aeronautical Laboratory for the Space Transportation Analysis and Decision Support Expert Systems study. Results of the study will impact the Phase III segment of the Advanced Launch System (ALS) vehicle. The two-year study will investigate the application of Expert Systems to on-board vehicle systems, such as telemetry and engine performance monitoring, and ground base processes.

Convair Wins HGV Conform Study. The Defense Advanced Research Projects Agency (DARPA) announced that Convair is one of five winners for the Hypersonic Glide Vehicle (HGV) Concept Formulation Study. Contract value is approximately \$400,000.

SSD Wins Air Defense Initiative Systems Integration Study. Space Systems is one of four winners for the Air Defense Initiative Systems Integration Study, valued at \$880,000. The 12-month study will address requirements for a modernized air defense architecture for the Continental United States through the twenty-first century.

DIS Inspection Begins Next Monday

With the upcoming Defense Investigative Service inspection, employees are reminded that possessing cameras and undeveloped photographic film within General Dynamics' facilities is limited and confined to designated, authorized personnel. If you have undeveloped film in your possession, please drop it in one of the CRA film drops conveniently located at the plant entrances.

Also prohibited on company property are recording instruments and radios, such as cassette players, headphone radios, playback-only cassette players, and compact disk players. Company-owned equipment used in company business are covered by Chapter 18 of the Convair Security Manual.

If you notice unauthorized use of such equipment, please report it to Industrial Security at 38417.



General Dynamics Corporate Battle Team Takes The Gold

It was a day filled with all the excitement of the Olympics for our 20-member General Dynamics Corporate Battle Team. Competing in the San Diego Corporate Sports Battle on September 26, our team captured first place.

After establishing a lead in the morning track and field events, GD's corporate squad never looked back as they scored additional points in the swimming competition. They placed in all 23 events, taking a total of 37 medals — 14 gold, 18 silver and 5 bronze. This victory has earned them a spot in the

National Corporate Sports Battle being held in Orlando, Florida, November 5-7.

Congratulations to the team members:
Space Systems — Mike Nitschke, Andy Mackay, Scott Seligman, and Julie Lawrence; **Data Systems** — Kathleen Keefe, Rosemary Morris, Laura Smith, Sally Morton, and Rich Davidson; **Electronics** — Kari Nilsen, Glen Fisher, and Kelly Gunning; **Convair** — Kathryn Eubank, Anne Yenigun, Maria Franco, Solange Szwarc, Victor Felix, Kevrette Johnson, and Jim O'Brien.

It's That Time Again

According to Standard Practices (SP) B 30 — Records Management, departmental files are to be purged at least once a year. Duplicate, unnecessary and nonrecord materials should be destroyed.

Supervisors are also reminded to review the files of terminating or transferring employees. Please make provisions for destruction or reassignment of these records.

Security Video A Winner

The American Society for Industrial Security (ASIS) presented the first place Distinguished Achievement Award for Video Competition, Private Industry to Convair for its latest security training video entitled "Security with Stan Pace: Secret Safe and Sound." Watch for more details in next week's issue of the *Weekly Log*.

Have You Met Convair Training Requirements?

Convair will conduct makeup training classes on Tuesday, October 13, for the Standards of Business Ethics and Conduct. These classes will be held at Kearny Mesa, building 17, room 2:

Ethics 7:30-9:30 a.m.

Expense Reporting 9:30-10:30 a.m.
Time Cards 10:30-11:30 a.m.
Security 11:30 a.m.-12:30 p.m.
If you need to attend any of these sessions, please contact your departmental training coordinator.



Frank Weller (second from left) is congratulated by (left to right) Ed Squires, division vice president; Don Kolesar, manager; Bob Danzl, supervisor; and Don Hannabarger, department head, on receiving a \$10,000 Employee Suggestion Award.

Frank Weller Receives Top Employee Suggestion Award

Thanks to Frank Weller, Material Operations representative, Convair has saved \$150,000. And by utilizing Convair's Employee Suggestion Program, Frank received a \$10,000 merchandise award.

Frank submitted his suggestion while he was a dispatcher for capsules and cannisters. He located eight capsules at Plant 19's disposition stores that were not being used because of "no requirements" in the system.

Frank thought there might be a chance he could "beat the system." He suggested

that the capsules be reworked to the latest configuration. To make this possible, he worked diligently with Engineering to generate an engineering change request notice and the planning required to rework the capsules. With persistent follow-up, Frank ensured that all changes were made according to specification.

Congratulations Frank, on receiving Convair's highest employee suggestion award.



Operations Recognizes Perfect Attendance

Fourteen employees from Operations in the Sheet Metal, Machine Shop, and Machine Maintenance departments were recognized for one year of perfect attendance. Special recognition was given to Jim Yates, supervisor in Machine Maintenance, for not missing a day of work in seven years.

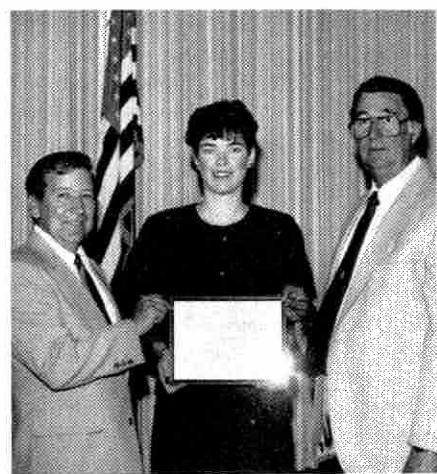
Individual Excel Awards and pens were presented to the group by Norm Pearl, director of Fabrication and Production Engineer-

ing, Bill Dickey, manager of Metal Fabrication and Rick Spiking, general supervisor of Machine Maintenance. Congratulations are extended to (left to right) Bud Breese, William Gaitor, Frank Herrera, Charlie Wiley, Larry Ostrow, Jim Steffes, Clem Mascarina, Jim Yates, Robert Finley, Stanley Cardo and Bill Stokes. Other recipients not available for photo are Bernard Foussier, Chuck Haffly and Benny Lorenzo.

There's Still Time To Sign Up For Blood Drive

Convair, Space Systems and DSD-Western Center employees still have the opportunity to make an appointment to donate blood next week. By participating, you and your dependents become eligible for replacement blood services if the need arises. You also will be providing a vital community service to the San Diego Blood Bank.

Please call now to make an appointment: Kearny Mesa, 73820; Lindbergh Field and Plant 19, 28244. Direct charging employees will charge their time to account 6293.



After completing a four-year apprenticeship program in tool and operations planning, Kelli Mahaffey receives her journeyman certificate from Marty Anaya (left) of San Diego Community Colleges and Al Pope, manager of Convair's Training and Motivational Programs. Kelli has also met the requirements for an Associate degree in manufacturing technology.

Calling All Entries

Don't miss the opportunity to participate in the General Dynamics CRA-sponsored Swiftest Business in San Diego 10K race on October 25. Registration ends Friday, October 16.

San Diego's leading companies will compete for the title of Swiftest Business based on fastest times plus the combined ages of the first three finishers on each team. This year, a two-mile fun run has been added to the event.

Following the race is a health fair and champagne brunch. Proceeds will benefit the Friends of Balboa Stadium. To sign up, contact Barbara Mooney at 39921.

Employment

For the week ending October 2, Convair Division employment was 8,379; Space Systems Division employment was 2,923.

CONVAIR

WEEKLY LOG

October 19, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Convair Wins 70% of Tomahawk

The following Cruise Missile FY88 Production award announcement was made October 14 at 1 p.m. San Diego time: *General Dynamics Corporation, Convair Division, San Diego, California, has been selected to manufacture 70% of the Fiscal Year 1988 Tomahawk sea and ground launched all-up-round cruise missiles. The Cruise Missiles Project is the selecting activity. The contract award to General Dynamics, Convair Division, is planned for 1 November 1987. Tomahawk sea launched cruise missile and ground launched cruise missile all-up-rounds have been competed annually in a full competitive environment since FY 1985. General Dynamics received 60% of the buy in FY85 and FY86 with McDonnell Douglas receiving 60% of the buy in FY87. Since the beginning of competition, more than \$1.8 billion in savings has been realized.*

Congratulations to all of the Convair Division employees for meeting the competitive challenge required to achieve this award. This win is strategic to our operations in San Diego and demonstrates that Convair is a strong leader and competitor in the production of this vitally important weapon for our military forces.

M.C. Keel
M.C. Keel, Division VP
& CM Program Director



(From left to right) John McSweeney, Dan Owens, Connie Terwilliger, Gary Miller, and George Roos are proud of the Distinguished Achievement Award for "Secrets . . . Safe and Sound."

Our Secrets . . . Safe and Sound

The assignment: Produce a video tape to educate and inform Convair and Space Systems employees about security.

The result: "Secrets . . . Safe and Sound"

The payoff: Increased awareness of security responsibilities. First place Distinguished Achievement Award, Private Industry category, in the 1987 video competition of the international meeting of the American Society of Industrial Security (ASIS).

If you have recently attended a security briefing at Convair or Space Systems, no doubt you've seen the newest award-winning video produced by Convair's Motion Pictures and TV department. "Secrets . . . Safe and Sound" was written, produced, and hosted by Connie Terwilli-

ger, producer/writer in motion pictures.

The video opens with Stan Pace, chairman of General Dynamics, stressing the importance of security to all divisions that do business with the Department of Defense. The "stars" of the video are Convair and Space Systems employees in scenarios involving security issues.

Dan Owens, director of Industrial Security, accepted the award at the ASIS convention, held in Las Vegas. John McSweeney, Convair general manager said, "I'm extremely gratified that this award is visible evidence of the division's continually improving security posture. It provides a further indication that our employees are being exposed to a first-class film to enhance individual security awareness."

New COLLARS On-Line For Production

The new Convair On-Line Labor and Attendance Reporting System (COLLARS) will be implemented on Monday, October 26 at Kearny Mesa, Century Park and Sycamore Canyon, and on Monday, November 2 at Lindbergh Field and Harbor Drive. Hourly employees and supervisors at Convair and Space Systems will begin using the system.

With COLLARS, attendance is automated and provides on-line information for supervisors and timekeepers. It also makes improvements to the reporting of labor transactions.

Supervisors of hourly employees who record labor on COLLARS or TDCs must attend a CLAS supervisor training session. Hourly employees who currently record labor on COLLARS (not on TDCs) must attend the CLAS employee training session.

Supervisors who have not been contacted regarding either training session should contact the Labor Help Line immediately: Convair - 24647; Space Systems - 77311.

For additional information, please contact Gail Turner or Lynn Bonnertz (Convair) at 27792 or Brian Brown (Space Systems) at 77805.

Convair Payroll Hours Extended

To provide additional assistance to employees, Convair payroll has extended its hours on salaried paydays to 7:30-9:30 a.m. and 12:30-4 p.m.

Gary Miller, manager of DoD Security, Dick Wright, security training consultant, Pete Kramer, security instructor, and Dan Owens helped our motion pictures group transform a two-hour viewgraph presentation into a 30-minute video. The video has become so popular internally it has been distributed to other General Dynamics divisions.

Other members of the Motion Pictures and TV department responsible for the success of the video are Bill Stevens, director/editor, T.W. Landis, video photography, and Todd Finnigan, audio/video technician.

This is the second honor bestowed upon Convair at the ASIS convention. The film, "The Weakest Link," also received the first place award a few years ago.

Ethics Reminder

Conflict of Interest: Employment of Government Personnel

In order to avoid possible conflicts of interest, defense contractors are required to follow certain procedures when attempting to hire retiring government and military personnel.

Current U.S. government employees, including military personnel, must file a disqualification statement (per DoD directives) prior to commencing employment negotiations with a company. General Dynamics also requires prospective employees currently working for the government to furnish the company with a copy of this statement. Such negotiations include telephone inquiries, personal contacts, and written correspondence prior to termination of government employment.

For further information on this issue, contact the Ethics program director: Convair — John Barrons, 38120; Space Systems — Dick Neal, 38367.

Develop Your Professional Potential

Convair's Management Development department offers ongoing professional development courses for salaried employees. Topics include classes in Effective Writing, Interpersonal Skills, Effective Presentations, Effective Negotiations, Performance Appraisal, and more.

If you are interested in attending these classes, have your supervisor contact your departmental coordinator. Please do not directly contact Management Development.

ACM

Gary Kornmayer	26650
Aircraft Programs	
John Newman	28550
CM Program Office	
J.D. Anderson	49556
Contracts & Estimating	
Fran Cannon	75866
Division Planning	
Judy Peterson.....	73066
Research & Engineering	
Paula Feldscher	38330
Finance	
Susan Barela	74679
Human Resources	
Cal Samuels.....	38049
ILS	
Linda Heida.....	78406
Operations	
Fran Richardson	26372
Program Development	
Ruth Wenger	74330
Quality Assurance	
Mark Saunders.....	38509



Members of the Turnarounds Quality Circle are (left to right) Terry Ralston, Gail Dimitroff, Mike Giorgetta, Bob Nestlebush, Bob Naish, Gerry Duncan and Mike McGee. Bill McCreery (standing), CMA manager, congratulates the group. Other members not available for the photo are Bill Sobien and Ramzi Murad.

Quality Circles Cut Costs in CMA

The "Turnarounds" Quality Circle from Contractor Maintenance area are a group of engineers, quality assurance and operations personnel representing a cross section of those who work in the area. The goal of the group is to reduce the cost of quality without compromising the quality of the product, thereby increasing Convair's competitiveness in the Tomahawk field.

The group found that many QARs and QRS items involved repetitive discrepancies that are inexpensive to repair. Even though the dispositions to fix these items were the

same each time, it took up to seven hours to complete the process, with only 30 minutes of that time being used to fix the item.

After extensive research into QRS and QAR histories, the group pinpointed 27 such discrepancies. The group proposed that these items be made standard maintenance procedures, reducing processing time to 90 minutes per occurrence while maintaining the DCAS/quality loop.

The group received an employee suggestion award of \$6,628 for their cost-saving idea. Five-year savings under the cost reduction program will be \$865,000.

Congratulations to the Turnarounds.

Enjoy The Extra Hour



Plant protection officer Paul Eaton reminds Ann Nicholas (Space Systems), B.J. West (Convair), Charlotte Bias (Space Systems) — and all employees — to set their clocks back this Saturday night as daylight savings time officially comes to a close at 2 a.m. Sunday, October 25.

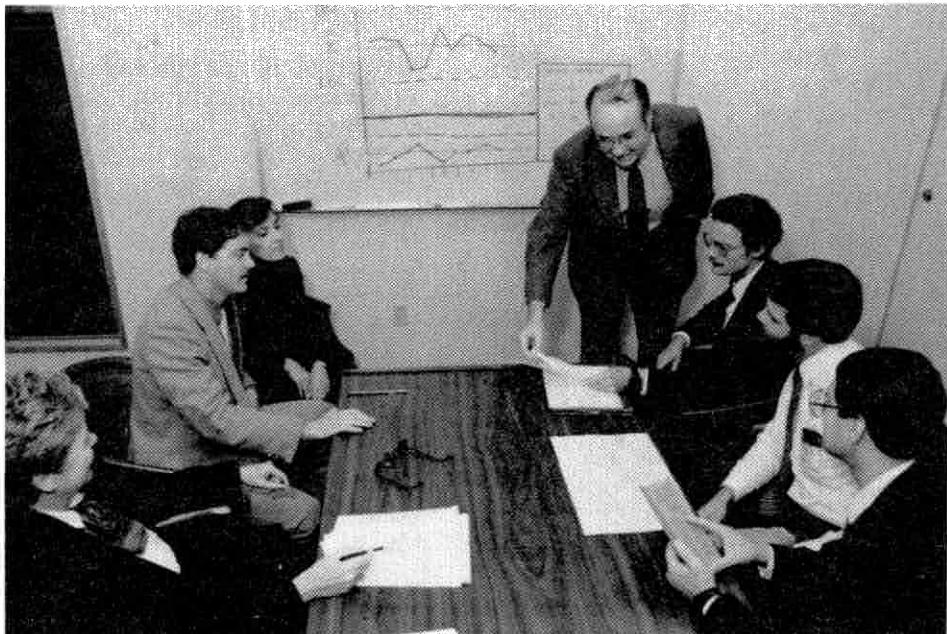
Employee Survey Update

Employee survey action is taking place. To enhance communications between employees and management in Art and Editorial (A&E), a suggestion box was installed. The box provides the opportunity for constructive and confidential interaction. A&E is proud to report the system is working.

For example, a department flyer soliciting comments and suggestions for department reorganization has generated a professional response from the members of the department. Some employees signed their name, allowing for further face-to-face communication with department management and others involved with the reorganization process.

Watch for a special edition of the *Weekly Log* sharing other Employee Survey feedback activities at Convair.

10/19/87



Members of the SPC team are (left to right) Gail Dimitroff, Don Dougherty, Maria Hernandez, Roy Dye, Hughes Robinson, Ernie Gauger, and Tony Casillas.

SPC Improves Quality

by Gail Dimitroff, PhD

If we were reading about SPC in George Orwell's 1984, we would probably think the idea far ahead of its time. But we're not. We're reading about SPC in 1987, here at Convair, and it's right on time.

SPC (Statistical Process Control) is a special application of statistical mathematics used as an aid in decision-making. Its prediction capability makes it a powerful concept. Convair's Quality Assurance and Operations department are taking advantage of that concept to enhance the quality of our products.

SPC provides an early warning if a particular stage in the manufacturing process of a product is not meeting specification limits. It involves taking measurements immediately — not a day, week, or month later.

The measurements are statistically charted and analyzed to determine whether a process is "in control" or whether it's producing defective parts. If the process is unstable, a process action team and SPC coordinator work together to determine the cause and bring the process under control. Some of the tools used to facilitate this process are the fishbone and pareto analysis. Also used are the Bar R charts, the problem check sheet and the variables control chart.

As Convair moves to incorporating SPC concepts, many enhancements are expected to emerge. One is the changing role of quality control. It will move in the direction of a continuous audit program, providing an assessment of the effectiveness of the control systems.

Within Quality Assurance all SPC activities are currently under the direction of Paul Grant, QA administrator. Implementation at floor level will be led by Vern Sydow, Quality Engineering. As SPC unfolds, it will be undertaken by the manufacturing side of the house.

Quality is the responsibility of all functional departments and employees. It is a daily endeavor that requires active support. Government buying activities are rapidly encouraging industry to move toward SPC. In some cases, commitment to SPC methods has become necessary to win prime contracts.

A number of Convair employees have received initial orientation to SPC. A broad-based training program is being implemented to aid in the transition of its methods.

What is the expected effect of SPC? Rudy Molina, vice president of Quality Assurance believes "the integrity of people and processes will result in improved productivity which in turn will be an aid to our competitive position."

Come Celebrate the Tomahawk Win

When: Tonight, 3:30-8 p.m.

Where: CRA Pavilion

Who: All employees are invited

Blood Drive Begins Today

Please remember your appointment

October 19 & 20

Kearny Mesa Fire Station
8 a.m. - 1 p.m.
Call 73820

October 21 & 22

Lindbergh Field Fire Station
8 a.m. - 1 p.m.
Call 28244

October 23

Plant 19 Building 4 Trailer
8 a.m. - 4:45 p.m.
Call 28244

Pick up your Beary Special Person T-shirt when you donate. Direct charging employees charge to account 6293.

23 Retire in September

Best wishes are extended for a happy retirement to these September retirees.

Years of Service

Name (Classification)

Thomas Chitty	
Engineering Service Chief	31
Wayne Crow	
Plant Protection Officer	19
Raymond Cripi	
Engineering Specialist	36
Edward Fitzgibbons	
Software Design Specialist	24
Maureen Grega	
Secretary	29
Ralph Halstead	
Industrial Security Technician	28
Marion Hess	
Group Leader	38
Robert Katan	
Quality Control Inspector	37
Edward Koester	
Engineering Specialist	34
William Luster	
Engineering Specialist	20
John Lyman	
Engineering Specialist	15
Andrew Marshall	
Engineering Specialist	24
Fay Mathis	
Missile C/O Electrician	40
Richard Moran	
Engineering Specialist	31
Kenneth Noonan	
Tooling Specialist	34
Phyllis Perez	
Federal ID Analyst	36
Rima Phillips	
Programmer Analyst	3
Elbert Stewart	
Launch Service Technician	29
Donald Sundstrom	
Material Analyst	37
Evelyn Toler	
Logistics Support Analyst	30
Charles Willey	
Production Planner	30
Leo Wilson	
Mockup Tooling Builder	22
John Zagami	
Logistics Support Analyst	35



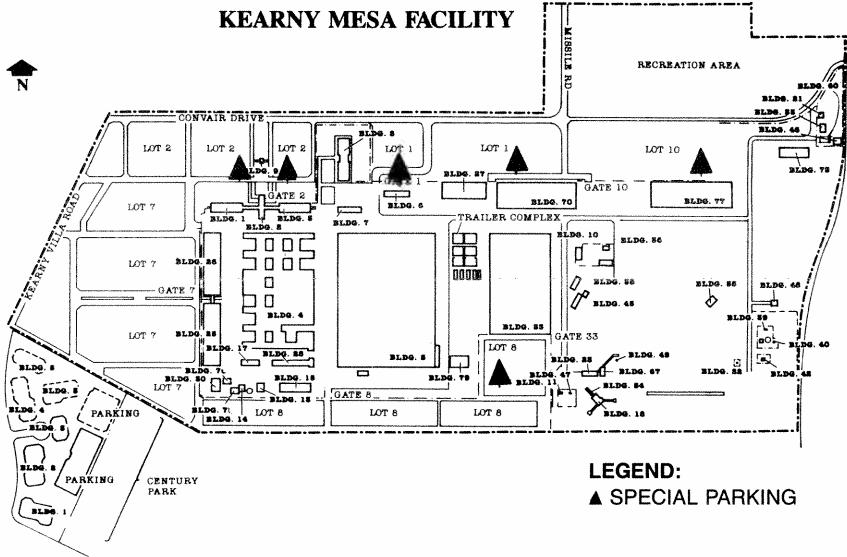
Employees Work Together To Enhance Productivity

Productivity representatives from all of Convair's functional departments meet monthly to review and discuss productivity improvements, projects and departmental PIP/QIP chart status and trends. Along with department management, they establish the productivity goals and objectives for the division and are responsible for the day-to-day administration productivity enhancements within their departments. Jointly, they developed the video, "Commitment to Excellence" used at new employee orientation and the brochure "Connections."

Our productivity coordinators, appointed by their respective vice presidents and directors, are (left to right): Bill Frank - Engineering; Jim Stevens - Program Development; Jackie De Lay - Finance; Fran Cannon - Contracts and Estimating; Norm Keith - Productivity; Barbara McDonald - ILS; Neal Fisher - Operations; Nona Peachey - IRM; Bill Bowersox - Planning and Facility Management; Joanne Kowalik - Human Resources; Earl Cantrell - Operations; and Martin Bennett - Quality Assurance.

Employee Special Sunday Parking Procedures

KEARNY MESA FACILITY



Because of the CRA-sponsored Swiftest Business in San Diego 10K run on Sunday, October 25, employees are asked to park in the special areas designated on the map before 7:30 a.m. Please do not park overnight

on the Kearny Mesa facility across from the Black Angus. All parking lots will be closed off during the race but will be reopened around 9:15 a.m. Thank you for your cooperation.

Bulletin Board

The Convair Recreation Association, in conjunction with Easter Seals, is offering our trick or treaters a safe Halloween. For the fifth consecutive year, Easter Seals has produced booklets containing coupons redeemable for free treats appropriate for children. These offers include frozen yogurt, donuts, slurpees, pizza, and entertainment treats. Cost of the booklets is \$1. Booklets are available at the CRA sales-booth at Kearny Mesa, Lindbergh Field, Plant 19 and building 61.

NMA Convair Chapter will hold its October dinner meeting on Tuesday, October 27 at the Marriot Hotel in La Jolla. No-host cocktails begin at 5 p.m. with dinner at 6:30. Bill Holland, vice president, Kidder, Peabody & Co. and business editor at KSDF radio, is the guest speaker. Cost is \$9.95 for members, \$19.95 for nonmembers. Tickets are available from NMACC boosters. Art Vietch, vice president Contracts and Estimating, is the executive host.

NMA Convair Chapter is offering two courses in the First Line Supervisor Program — Counseling and Law For the Layman. Cost for each course is \$5 for NMA members and \$20 for nonmembers.

"Counseling" will be held on Wednesday evenings from 4:30 to 6:30 p.m. beginning October 28 in Kearny Mesa's building 17, classroom 6. Registration is from 4:30 to 5:15 p.m. on October 21 at the same location. For more information contact Sharon Sabalvaron at 39234 or Caroline Harbeck at 75743.

"Law For the Layman" begins on Thursday, October 29 from 4:30 to 6:30 p.m. in Lindbergh Field's building 1, old mezzanine, Finance conference room A. Registration is from 4:30 to 5:15 p.m. on October 22 at the same location. Please contact Doug Peachey at 26679 or Caroline Harbeck at 75743 for more information.

Woo's Work On Exhibit

At this year's Artist's Guild Annual Juried Exhibition at the San Diego Museum of Art, don't be surprised if you see a familiar name hanging among the masterpieces.

Joanne Woo, avionics drafter in Space Systems, has two pieces of fine art (mixed media drawings) on display in the Rotunda. The pieces will be on exhibit from October 31 through December 13.

Employment

For the week ending October 9, Convair Division employment was 8,378; Space Systems Division employment was 2,940.

CONVAIR

WEEKLY LOG

October 26, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Space Systems Selected For GOES Launch Services

NASA and the Department of Commerce recently announced the selection of General Dynamics Space Systems Division for negotiations leading to award of a contract for Expendable Launch Vehicle (ELV) transportation services for the department's National spacecraft GOES I, J and K.

NASA, acting as NOAA's agent, will award the contract to General Dynamics contingent upon reaching final terms and conditions for the Atlas Centaur transportation services mutually acceptable to NASA and the company.

GOES spacecraft (Geostationary Operational Environmental Satellites) provide near-continuous, high-resolution visual and infrared imaging of weather systems over large areas of the Earth. They are especially valuable in identifying hurricanes at an early stage and other major storms and in providing critical data needed on a routine basis for weather forecasting.

This contract will be the first under NASA's plan to acquire ELV transportation services commercially. General Dynamics will assume total systems performance responsibility for overall program and subcontractor management; vehicle design, production, testing and integration; mission integration; launch services; system effectiveness; and overall launch vehicle performance. Separate arrangements will be made for use of government-owned facilities and other assets.

The contemplated, firm fixed-price contract will provide launch services for GOES-I, targeted for launch in March 1990; GOES-J, targeted for December 1990; and GOES-K, targeted for May 1992. It also will contain options for GOES-L and M, for which launch schedules and arrangements will be determined. General Dynamics offered a price of approximately \$315 million for five launches to geosynchronous transfer orbit.

The GOES ELV transportation services contract will be managed by the NASA Lewis Research Center, Cleveland.

Personnel Hotline Numbers

Convair 39528
Space Systems 78990



Operations Recognizes Employees of the Month

Each quarter Ken Lake, vice president of Operations, and his staff hold an Employee of the Month breakfast. This breakfast recognizes and thanks those people who have been selected for superior performance during the quarter. The quarterly gatherings began as a request from employees to enhance communications within the department.

Last week, 28 employees were recognized. Lake told the group that he could feel the pride and enthusiasm within the organization. He said that there were many challenges ahead, but he knew that there was a spirit within the department to get it done. "Attitudes are contagious," he said, "and the big pluses are your attitudes."

Congratulations to the third quarter Operations Employees of the Month:

Manufacturing Engineering

Dick Ludlam, Jim Ball, Peter Nguyen
(Director — Jim Annis)

Procurement

Jim Masterson, Lisa Valles, Don Myers
(Division VP — Russ Babcock)

Advanced Programs Mfg Product Line

Richard Faulkner, Pam Jackson, Steven Hirsch
(Director — Dave Cormany)

Manufacturing/Material Control & Scheduling

Jody Manuel, Richard Anaya, Ken Wilson
(Director — Don Hannabarger)

Aircraft Programs Mfg Product Line

Bob Smith, Jean Drudge, Noel Galang
(Director — Lou Imbimbo)

Fab & Production Engineering

Paul Bao, David Samudio, Elaine Lambert, Richard Haugland
(Director — Norm Pearl)

CM Mfg Product Line

Darlene Bibb, Donald Babbitt, Bruce Wyer
(Division VP — Ed Squires)

Ops Administration

Curtis Crawford, Joe Loper, Richard Gray
(Director — Joe Stelmah)

Plant Services

Michael Kreyling, Johnny Tyler, Milt Boyd
(Director — Bill Wise)

NewsBriefs at Convair and Space Systems

Hypersonic Glide Vehicle (HGV) Project Office Director Visits. Col. Dale Condit, director of HGV Advanced Development Projects office, recently visited Convair to review the Hypersonic Glide Vehicle program. He was impressed with Convair's computer-aided design capability and with the level of technology achieved on this program.

Space Systems selected for COLD-SAT Study. NASA Lewis Research Center has selected Space Systems for further negotiations for the Cryogenic On-Orbit Liquid Depot Storage, Acquisition and Transfer Satellites (COLD-SAT) study. This study will verify technology and analytical tools for space management of subcritical cryogens. Space Systems is teamed with Ford Aerospace and Communications Corporation. The value of the contract is \$2.25 million through 1992.

Employees' Contrib-Club Supports Home Start

Last year more than 31,000 cases of child abuse were reported in San Diego County. Defined, child abuse is the nonaccidental physical injury, sexual abuse or molestation, emotional abuse or neglect of a child. It doesn't discriminate on the basis of economic, social, religious, cultural or racial affiliations. Child abuse affects the entire community.

Fortunately, there is an agency devoted to counseling and educating parents to prevent child abuse — Home Start, Inc. Serving the community since 1972, Home Start provides services in the privacy of its clients' homes.

Helping families to mend and rebuild their lives isn't done overnight. The average treatment runs a year and a half or more. But with Home Start's intervention, 90 per cent of the parents treated significantly change their behavior.

The Employees' Contrib-Club has been supporting Home Start's work in the community for many years. This year's grant of \$1,000 helped to fund its Outreach Program for high-risk families.

Our Employees' Contrib-Club helps Home Start and other community service organizations meet their needs. For more information on how you can provide a vital service to the community, contact Susan Norris at 28250.

Improvements at Kearny Mesa Facility

To improve safety and traffic flow at the Kearny Mesa facility, construction is underway. A traffic signal is being installed at the intersection of Electronics Way and Kearny Villa Road and a right turn lane at Convair Drive and Ruffin Road is being added. Construction crews and equipment will be in the area through the end of November.

Employees are requested to exercise caution and slow down while driving through the project areas. Please be alert for traffic direction signs, workers and equipment.

Your cooperation to maintain safety in the implementation of this important project will be greatly appreciated. If you have any questions please contact Harry Estline, facilities and planning management, at 75119.



Teleconference participants included (left to right, around table) Val Habjan, Woody Vandever, Terry Banderas, Coralynn Nutter, Barb Oliver, Rich Ingardia, Jim Hollopeter, and Gene Perkins, (left to right, rear) Joe Moore, Tom Donovan, Denis Baldwin, Mike Ayres, Jim Valk and Charles Abbate.

Electronic Documentation Teleconference Held

More than 50 representatives from General Dynamics' divisions participated in a one-day teleconference in support of a Space Systems' initiative to design and implement an integrated electronic documentation system. Sponsored by Space Systems Marketing Communications and Proposal Development (MC&PD) department, the conference focused on the near-term plans of the MC&PD, Graphic Services, and Engineering departments.

Woody Vandever, executive vice president of InterConsult (an internationally recognized corporate electronic publishing consulting firm) conducted the meeting.

His presentation was entitled "Perspective on the Industry and Identification of Critical Issues."

Recommendations stemming from the conference included formation of an executive level committee for systems integration at Space Systems and an evaluation center where these systems can be researched and tested.

Val Habjan, teleconference coordinator said, "We knew there was a tremendous experience base out there in our counterparts. The contributions of each of the divisions in an open forum were excellent. It was clear to all participants that our sister divisions had a genuine desire to assist and support us."



Congratulations to Don Early, senior facilities analyst (250-2), who was elected to the board of directors to the National Association for Sickle Cell Disease. Don is currently the president of the sickle cell center in San Diego. This association educates and counsels families afflicted with sickle cell disease, a genetic blood disorder that afflicts minorities.

Employee Survey Update

Employee Survey action is taking place. In Plant Services, one issue raised was the poor communications between supervisors and employees. To help improve this situation, supervisors began meeting in focus groups to discuss good communications skills. When supervisors met with their employees they exercised the techniques learned in the sessions. Plant Services is pleased to report that they are now receiving more positive feedback from employees after group meetings.

Watch for a special edition of the *Weekly Log* featuring other employee survey feedback activities at Convair.

Employment

For the week ending October 16, Convair Division employment was 8,379; Space Systems Division employment was 2,945.

CONVAIR

WEEKLY LOG

November 2, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

NewsBriefs at Convair and Space Systems

Convair Awarded 55%. Convair has been awarded a 55 percent share of all recertifications and other maintenance to be performed under the FY88 Tomahawk AUR Depot Maintenance Contract.

CRAD Wins. From Honeywell for the AFWAL "Hypersonic Glide Vehicle Mission/System Trade-Off," value: \$340,000. "Development of Hot Structure Design Criteria for Structural Article Demonstration Test," sponsored by AFWAL, value: \$627,000.

Space Systems To Sub For Two Prime Shuttle-C Contractors. Marshall Space Flight Center has announced the prime contractors for the Shuttle-C award. They are Martin Marietta Corporation, Rockwell, and United Technologies Corporation. Space Systems proposed as subcontractor to Martin Marietta and United Technologies.

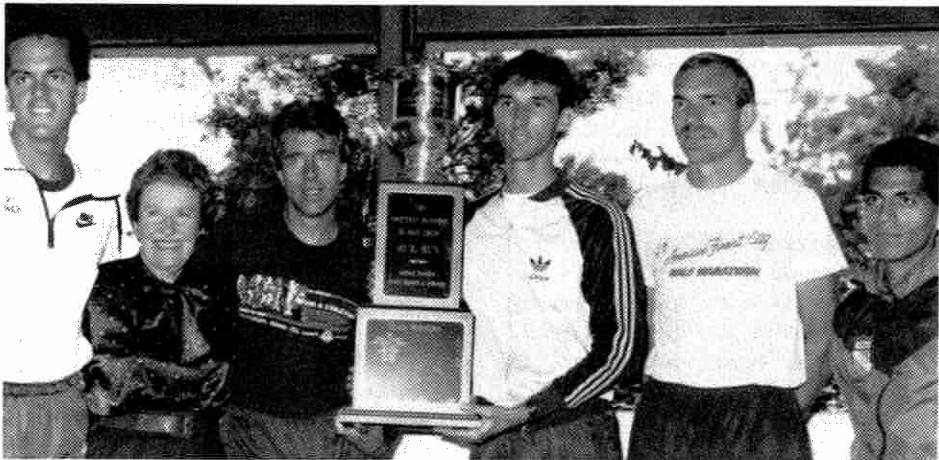
Space Systems Awarded Study Valued At \$500,000. Marshall Space Flight Center has also awarded Space Systems the "Definition of Avionics Concepts for a Heavy Lift Cargo Vehicle" study. The results of this study will support work on the Shuttle-C contract.

Notice Published In Commerce Business Daily For Arms Phase II. Convair was named as the only source able to fill the ARMS Phase II requirement. The knowledge of the SIOP planning process, expertise in aircraft and cruise missile routing procedures and interactive workstation capabilities, as well as knowledge and use of IDMS/R (data base management system) made it possible. The request for proposal is expected by mid-November.

Employee Benefits Notice

Open enrollment for employee benefits changes begins today through November 30. This year, a new medical and dental plan option are available. Booklets will be mailed to San Diego area employees explaining the different benefit options. Changes become effective January 1, 1988.

General Dynamics Wins Swiftest Business 10K Run



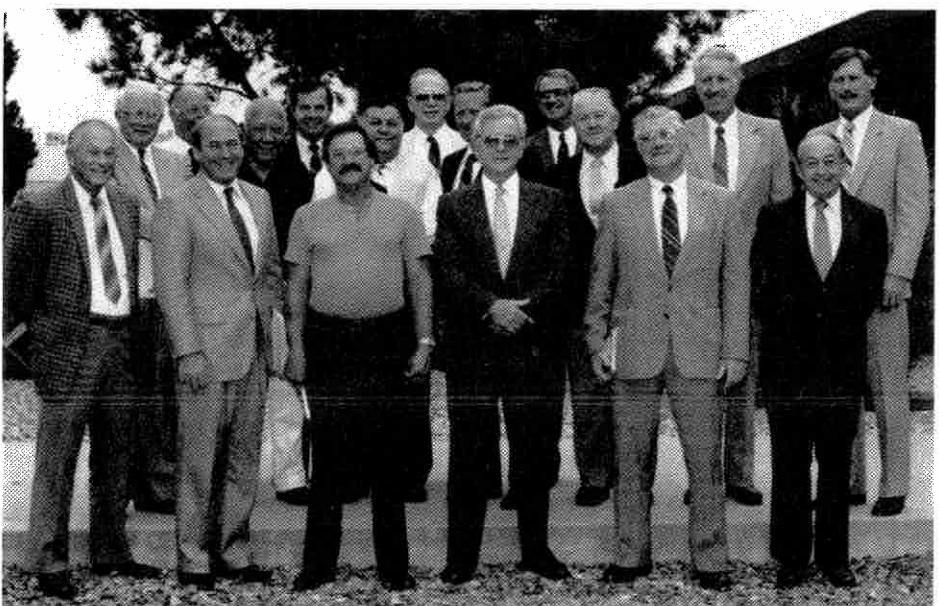
The Mayor's Cup went to the Indirect Charges, presented by State Assemblywoman Lucy Killea (second from left). The team winners are (left to right) Tim Smith, Andy McKay, Dan Raby, Jim Engel and Joe Ramirez.

For the second consecutive year the Indirect Charges ran off with first place and the Mayor's Cup trophy at the Swiftest Business in San Diego 10K Run held on October 25. The five-member Convair and Space Systems team won with a combined time of one hour and 40 minutes. Dan Raby was the first-place finisher with 32 minutes and 39 seconds. State Assemblywoman

Lucy Killea presented the team with their trophy.

More than 400 people participated in the event. After the race, the group enjoyed a champagne brunch and health fair at Missile Park.

CRA extends a special thanks to everyone who helped to make the event a success.



At a recent Space Systems service awards breakfast, 11 employees celebrated 405 years of service. Bob Bruce received special recognition for 50 years with the company. A special thanks for years of dedicated service are extended to (left to right, row 1) Carlton Leonard, 35 years; Marty Winkler (staff); Nick Montallegro, 35 years; Bob Bruce, 50 years; Jim Pate, 35 years; Creede Greer, 35 years; (left to right, row 2) Alan Lovelace, general manager; Andrew Aguirre, 40 years; Frank Lucio, 35 years; Clifford West, 35 years; Chester Kapalla, 35 years; Bob Cox, 35 years; Jack Coffman, staff; (left to right, row 3) Bob Blair, 35 years; Roy Bennett, staff; Frank Robinson, staff, and Ron Stoneburner, staff.

Space — The High Frontier

Space Systems' general manager Alan Lovelace and senior engineer Bruce Cordell will be featured in a teleconference called Pioneers of the High Frontier — The Future. Walter Schirra, one of the original astronauts aboard the Mercury, Gemini and Apollo space missions, will also be featured.

The conference is scheduled for live broadcast on KPBS at 9 a.m. on Wednesday, November 4. Students across the nation will have the opportunity to talk directly with astronauts and leaders in the space community. This program is made possible by a grant from Space Systems Division.

This broadcast will consider the proposals presented in the Report of the National Commission on Space: Pioneering the Space Frontier. It is designed for K-12 students in participating schools equipped with satellite dishes or cable systems utilizing the learning channels. They are intended to stimulate classroom and community discussions on Pioneering the Space Frontier: The Next 50 Years in Space. A second teleconference on Pioneers of the High Frontier — The Past, is scheduled for December 10.

Our Ethics Commitment To Our Customers

According to the General Dynamics Standards of Business Ethics and Conduct, "to our customers we will be attentive and strive to maximize the value, quality and operability of General Dynamics products and services." One way this is achieved is by ensuring that our products are designed and manufactured to meet the appropriate inspection criteria of our customers. To meet this criteria, we must perform the necessary testing and provide the necessary documentation in support of this testing.

Editor's Note

Thanks, Readers

When the *Weekly Log* reported that Daylight Saving Time (DST) ended on October 25, several calls were received by our staff. Concerned readers had heard erroneous radio and television reports that clocks should be moved back one hour on November 8. We checked our information sources and found that the discrepancy had to do with the start of DST. On July 8, 1986, Public Law 99-359 amended the Uniform Time Act of 1966 to start DST the first Sunday in April instead of the last Sunday in April.

We appreciate your keeping abreast of the times!



R&E Names Recce Employee of the Month. Alan Recce (center) was named Research and Engineering's September Employee of the Month in recognition of his work on test equipment for the Cruise Missile Advanced Guidance program. He designed a unit that replays sensor tapes on an aircraft video monitor during or after a flight. This unit resulted in a dramatic cost savings in flight time, computer usage and manhours. Congratulating Alan are (left) Ray Beuligmann, division vice president, Research and Engineering, and Bernie Freund, chief of special purpose processors.

SSIP Reminder

During the month of November you may make percentage and/or option changes to your Stock Savings Investment Plan or you may enroll if you have one year of continuous service.

All changes and applications must be turned in by November 30 and will become effective the first full pay period in January. Change forms and applications are available in the Employee Benefits offices at Kearny Mesa building 8 and Lindbergh Field building 16.

Are We Sitting On A Gold Mine?

Platinum, gold and silver are precious metals found in parts, supplies and equipment used at Convair and Space Systems. Our plating labs, photo labs, assembly areas and material review cribs generate large amounts of excess or scrap components that are gathered and eventually shipped to be refined and reused.

Property Administration is preparing a precious metals awareness presentation to be given in November. Identification, procedures and control of precious metals within the company will be discussed. A general overview will also be given of the precious metal recovery program and how it affects EPA regulations, security policies and general property administration.

If you'd be interested in learning more about precious metals, notify your supervisor who will contact Property Administration for times and dates. Arrangements and questions can be directed to Mike Henson at 75438.

Three Space Systems Engineers Receive Patent Awards

Mickey Cornwall, Ted Stern and Don Nirschl recently had a patent application filed in the U.S. Patent Office. The engineers worked together to develop an invention disclosure entitled "Solar Simulator Employing Flexible Optics." Simulating a portion of the sun's light spectrum is used in many applications to illuminate a test specimen.

This invention overcomes many disadvantages of existing solar simulators. Costs are reduced due to the elimination of mirrors, lenses and alignment requirements. It also reduces the primary power requirements over present systems.

Mickey, Ted and Don each received a \$300 patent award when the application was filed.

Travel Services Offers Alternative

Travel Services is undergoing a transition period which is limiting its production and servicing capability. If you are experiencing telephone delays and slow processing times, please send your travel requests to EM/OS account CV-TRAVELOFC. Please be sure to include your name, phone extension, division, employee number, department, travel order number and other pertinent information required on the travel order. Travel Services regrets any inconvenience you may have experienced.

Bulletin Board

The square dance club sponsored by CRA is offering a beginners square dance class starting Tuesday, November 3 at 8 p.m. in the CRA Clubhouse. Cost of the class is \$1.50 per person; the first night is free. For further information, contact Ed Brady at 28286 or Ken Schmidt at 28927.

Space Systems Division is now a member of the Wordperfect Users Group. Meetings will be held on the third Wednesday of each month from 6:30 to 8:30 p.m. at Hybritech, Inc., 11095 Torreyana Road. Please contact Renee Hayden at 77780 for more information.

ASM International is presenting a heat treat seminar on November 5, 12, and 19 from 7:30-9:00 p.m. at the CRA Pavilion. For further information contact Norm Pinchuck at 78113.

Employment

For the week ending October 23, Convair Division employment was 8,368; Space Systems Division employment was 2,947.

CONVAIR

WEEKLY LOG

November 9, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Convair Reviews Third Quarter Performance

General manager John McSweeney recently presented Convair's third quarter performance review to Corporate. Last week, in McSweeny's absence, George Roos, vice president of Human Resources, discussed third quarter review highlights at three separate all-supervisors' meetings.

"We want everyone to feel good about our successes this past quarter," said Roos in his opening remarks, "but everyone must be on guard. Margins for being successful are becoming more narrow. We are not where we want to be yet."

Roos feels our posture is better than the industry average, but feels we need to expand our horizons. Strategic goals to keep us going in the right direction include maintaining a position as a top supplier and systems integrator of medium- and long-range cruise missiles. We also plan to extend the launch and control systems product line, as well as identifying and developing new opportunities based on division strengths.

The group was reminded of administrative highlights that occurred during the quarter. Our property control system was

approved by DCAS, the small business programs were rated outstanding, and Convair's security awareness video, "Secrets . . . Safe and Sound," won first place at the American Society of Industrial Security conference.

Roos went on to discuss new business opportunities, such as the Rail Garrison Program and advanced standoff weapons, and some draft 1988 division goals. In 1988, we will strive to significantly improve our quality and reliability performance and image, maximize our share of FY89 Tomahawk awards, and continue to improve our administrative and financial performance. We also want to win targeted new business opportunities and continue progress on employee survey actions.

Roos concluded the meetings by saying that Mr. McSweeney was pleased with the third quarter results and encouraged by Convair's prospects for new business opportunities. He expressed thanks for the hard work and contributions made by everyone, but cautioned that we cannot abandon our pursuit of high quality and low costs.

New COLLARS Implementation Complete

The conversion of all Convair and Space facilities to the new Convair On-line Labor and Attendance Recording System (COLLARS) was completed last Monday. With COLLARS, attendance of hourly employees at both divisions is automated. Labor transactions for those on COLLARS have also been enhanced to reduce edit errors.

Labor Accounting and the COLLARS project team are available to answer any questions you may have regarding hardware, software and training. Your comments and suggestions are also welcomed. Please refer to the following list for assistance:

Labor

Convair Labor Help Line	24647
Space Labor Help Line	77311

Terminal Problems

DSD Service Center	33375
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New Terminals or Relocation

Ed Swafford	27036
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Badges

ID Office

Kearny Mesa	38404
Lindbergh Field	28925

Training

Don Felts	27524
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Screen/Transaction Problems

Lynn Bonertz	27792
Gail Turner	24692

General Information

Gail Turner	27792 or 73946
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Timekeeping

Convair

Kearny Mesa	73372
Lindbergh Field	28626
Plant 19	25895

Space

Brian Brown	77805
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DIS Inspection Ends

During the past two-and-a-half weeks, representatives from Defense Investigative Services (DIS) have been conducting their semiannual Security inspection. Last Thursday, we were given a satisfactory rating. However, DIS found nine discrepancies — seven were procedural and two involved facilities arrangements, all of which will require our diligent efforts to correct in a timely fashion.



Convair's general manager John McSweeney and staff members saluted senior employees at a recent service awards breakfast to celebrate their 35, 40, and 45 years with the company. A special thanks for dedicated service is extended to: (row 1, left to right) Larry Rodrigues, 35 years; Ismael Ortiz, 35 years; Roger Jett, 35 years; Don Colt, 35 years; George Zuniga, 35 years; Bob Lanzo, 35 years; Paul Grant, staff; W.S. Sherman, 45 years; (row 2, left to right) Harold McCaslin, staff; Robert Andrews, 35 years; John Gabriel, 45 years; Carroll Lunsford, 40 years; Medoline Davis, 35 years; John Slagle, 35 years; Lou Imbimbo, 35 years; John McSweeney; John DeBlanc, staff; (row 3, left to right) Ed Squires, staff; Robert Barry, 35 years; Earl Moon, 35 years; and Russ Babcock, staff.

Maloney and Rausch Receive NASA Technical Innovator Awards

John Maloney (Space Systems) and John Rausch (Convair) each received a NASA Technical Innovator Award for their studies of a deployable aerodynamic decelerator brake for spacecraft. The research was a joint Convair and Space Systems project conducted during 1985 before the divisions split.

The brake studied could be used by a spacecraft moving from high orbit around



Space Systems' John Maloney with Edward Bock (left), director of Systems Engineering and Logistics Engineering, and Marty Winkler, division vice president - Research and Engineering.

the Earth to a lower orbit. It would reduce excess velocity by means of aerodynamic drag, rather than a retropropulsion burn. The spacecraft would graze layers of the atmosphere repeatedly during orbit transition. This would allow it to be slowed down by the brake's drag and pulled closer by Earth's gravity. The brake generates lift as well as drag to allow more accurate control of the final velocity and limited plane change capability.

Congratulations, John and John, on a job well done.



Convair's John Rausch with Ray Beuligmann (left), division vice president - Research and Engineering, and John McSweeney, general manager.

Second Edition of Blue Book Ready for Distribution

The Ethics Program at General Dynamics is more than two years old. It has become a significant factor in our daily business activities.

The General Dynamics Standards of Business Ethics and Conduct, commonly referred to as the blue book, has been the "living document" for the program. Recently it has been updated by our corporate office.

Distribution of the second edition is scheduled to begin this month. Each employee will attend a training class to receive the new booklet and review it with their supervisor. Acknowledgement cards will also be distributed. Your supervisor will notify you of the date and time of your training session.

Enjoy a Show at the Space Theater

To thank General Dynamics for its Corporate contribution and continuing support, the San Diego Hall of Science has provided us with Reuben H. Fleet Space Theater admission certificates. These certificates are good for admission to any regularly scheduled show in the space theater until November 31.

If you'd like to see a show, admission certificates are available in Convair's Community Relations office, building 1, first floor, or call 39955.

Con-Trib Club Helps Purchase Blood Fusion Pumps

Sickle cell diseases are genetic blood disorders that afflict minorities. One of these inherited conditions is sickle cell anemia, which afflicts Black Americans. One out of 500 Blacks is born with sickle cell anemia and approximately one out of 12 is a carrier of the trait.

With sickle cell anemia, sickle-shaped blood cells plug up blood vessels. This obstructs the flow of blood, causing pain and damage to tissues and organs. Pain is relieved through medication and blood transfusions.

Right now, there is no cure for sickle cell anemia. However, the Sickle Cell Anemia Education and Information Center, Inc. provides screening, testing, counseling and other health and social services to San Diego area residents.

This year, the Employees' Con-Trib Club supported the Center's effort with a \$2,000 grant to buy blood fusion pumps. This is just one example of how our dollars to the Employees' Con-Trib Club help serve the community. For more information on other services and agencies supported by Con-Trib Club, please call Susan Norris at 28250.

Employment

For the week ending October 30, Convair Division employment was 8,337; Space Systems Division employment was 2,965.

Bulletin Board

The CRA Commodore Computer Club, in conjunction with the San Diego AMIGA Users Group, is sponsoring a demonstration of the latest 16/32-bit computer system from Commodore Business Machines, Inc., the AMIGA 2000. The presentation is scheduled for Friday, November 20, 2-6 p.m., at the CRA pavilion.

The Computer Club meets the third Tuesday of each month in room C at 4:30 p.m. in the CRA clubhouse. For more information, contact Gerry White at 37069.

Tickets are now available from Convair NMA boosters for the dinner meeting on Tuesday, November 17 at the Town & Country Hotel in the Presidio Room. Featured will be a spectacular multi-media presentation capturing General Dynamics' achievements over the past 100 years. No-host cocktails begin at 5 p.m., dinner at 6:30 p.m. Cost to NMA members is \$10; nonmembers, \$18.

KM Safety Office Moves

The Kearny Mesa Safety office has been relocated in the south end of the trailer complex (trailer 78-4) behind building 5. The mail zone is 50-1315 and the phone numbers remain 73586 and 75912.

Thank You Beary Much

A "beary" special thanks from the San Diego Blood Bank to employees who donated at last month's General Dynamics' blood drive. With your help, the San Diego community now has 699 additional units of blood.

General Dynamics Receives Fedco Benefits

CRA and Fedco membership department stores are offering General Dynamics employees the opportunity to discover the benefits of Fedco shopping. Fedco has declared November 1 through November 22 as General Dynamics Employees Days. Employees may shop at Fedco without paying a membership fee by presenting their employee badge at the door.

If you decide you would like to become a Fedco member, you may apply for a lifetime membership for \$5 at any Fedco location.

Think about it

Don't be surprised if a *Weekly Log* staff member approaches you and asks, "What do you like most about working at General Dynamics?" Responses will be published in a future issue of the *Weekly Log*.

CONVAIR

WEEKLY LOG

November 16, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

MEP Review Receives Bronze Award

Convair was presented the Bronze Award for its 1987 Management Effectiveness Program (MEP) Review. The award was presented by Ollie Boileau, president of General Dynamics, at the third quarter performance review.

MEP is an internal review used to assess the overall effectiveness of the functional and administrative areas of our Company's defense operations.

General manager John McSweeny extends his appreciation to all employees for their participation and support during this period. He also requests your continued dedication in driving the division toward a Gold Award in 1988. Our 1988 review will be conducted on-site by a corporate team.



Rich Corbin, vice president of Finance; Susan Barela, MEP coordinator; and John McSweeny, general manager, congratulate each other on receiving the Bronze Award.

Cost of Quality Review

Defense Logistics Agency (DLA) personnel recently conducted a review of Convair's accounting method for cost of quality.

The review was part of an assessment conducted by the government to determine existing cost of quality recording requirements of major contractors.

The DLA team reviewed quality cost data reporting from QAR/QCO's in the factory and elements of the cost accounting system.

DCASPRO commander Captain Christopher said the Convair system met all contract requirements. No improvement recommendations were made.

General manager John McSweeny said the excellent results were due to significant system improvements put in place in 1983 and the division's attention to detail in manufacturing system discipline.

What's the Status of the New Phone System?

Installation of the new System 85 telephone system has been taking place since August.

So far, 6,000 new telephones have been installed at Convair and Space Systems in preparation for the changeover scheduled to begin at 6 p.m. on Friday, December 11. Phone service and EM/OS will not be available during this changeover. The new system will begin operating on Monday, December 14.

System 85 integrates voice and data technology to provide simultaneous telephone and EM/OS transmission. It will reduce the current number of telephone switches and cost of tie-lines, and improve telephone number portability. Department chargeback for telephone sets will be reduced by approximately 20 percent.

User training on the new telephone system will begin November 23. The *Weekly Log* and EM/OS transmissions will keep you posted on the progress of System 85.

HR Provides Employment Verification

Employment verification for Convair personnel is provided by Human Resources (HR) to facilitate employee financing activities.

In order to process verification requests promptly, employees must submit the financing agency's form to HR. The only information required on the form is an authorizing signature and employee number. HR will complete the form and return it to the requesting agency.

Salaried employees should submit verifications to Salaried Compensation, mail zone 11-1380; hourly employees to Employment, mail zone 90-1352.

Ethics Reminder

Time Card Reporting

Timely and accurate completion of time cards as described in company policies and procedures is essential. All employees shall report only the true and actual numbers of hours worked. Shifting of costs to inappropriate contracts is strictly prohibited. Please use proper absence codes (article numbers) to report and charge all authorized paid absences.

Mock Disaster Drill Scheduled for Thursday

Picture this: A light plane receives takeoff clearance from the Montgomery Field Control Tower. The plane angles upward, heads west, and banks sharply to the right. Suddenly, it loses power. The right wing dips as the pilot apparently tries to come around for a landing. The aircraft sideslips and plunges into building 5 at Kearny Mesa. It crashes through the roof with the left wing slicing through the northeast section of the mezzanine, exploding on impact.

The fire and smoke are intense. The initial call to the Emergency Control Center indicates extensive damage to the building. The pilot and passenger are dead. There are reports of other casualties.

Fortunately, this is only a fictional scenario for the mock disaster recovery drill scheduled for Thursday morning, November 19. This drill is being conducted to ensure the quick response of our disaster recovery team in the event of a real emergency.

If you see fire trucks, ambulances and other rescue operations around building 5 on Thursday, don't be alarmed and please don't interfere.

Security Is Everybody's Business

Recently there have been reports of vandalism to cars in the parking lots at the Kearny Mesa and Lindbergh Field facilities. Plant Protection officers constantly patrol the lots to ensure security of our property, but can't always deter criminals.

If you see suspicious people around the lots, please don't approach them yourself. Call Industrial Security at 38417 and inform them of problems. They will follow up.

Reliability Engineers Needed

Convair's System Engineering Reliability department has urgent requirements for two senior engineering specialists, labor grade 12. The preferred candidates should have ten years or more of reliability and/or electrical design experience. BSEE/MSEE required, PhD preferred.

For more information, please see this week's edition of the *PEP Bulletin* or call Jim Donnelly at 39504.

NewsBriefs at Convair

Convair Quality Initiatives Lauded by USAF, and U.S. Navy, and PMR. A Program Management Review (PMR) with the Cruise Missile Program (CMP) and Aeronautical Systems Division (ASD) was held recently at Convair. Program status was presented on development and production programs, depot and flight test programs, and product assurance. Gerry Miller, CMP technical director, complimented Convair on its delivery of flight test, maintenance, and production missiles. He also said that Convair's efforts on quality were a benefit to all. Colonel Tim Sinclair, GLCM SPO director, ASD, said that the next cruise missile briefing to the Secretary of Defense will include comments on Convair's superb support of the GLCM program.

Submarine VLS Phase III Proposal Submitted.

The Sub vertical launching system Phase III replanned program proposal was completed and delivered to the government. The program replanning represents an increase of approximately \$6 million over the original price of \$20.3 million.

Bulletin Board

The Space Systems and Convair Chapters of the National Management Association invite you to attend the first of a series of quality seminars beginning November 19 through May 14, 4:30 to 6:30 p.m. To register, contact Chris Wright at 25863, Andy Molnar at 73314, or Lori Gorski at 38377.

Convair Recreation Association has arranged for Hickory Farms to offer samples of products in the Kearny Mesa and Lindbergh Field cafeterias on Wednesday, Thursday and Friday this week from 11 a.m. to 1 p.m. A 10 percent discount is offered on all purchases. If you can't make it during lunchtime, Hickory Farms will offer samples in the CRAs at Kearny Mesa until 5 p.m. and Lindbergh Field until 3:45 p.m.

Congratulations, Graduates

Convair's John Vanderslice recently received his master's degree in systems management from the University of Southern California. Space Systems' Harold Parker received his associate's degrees in applied design and liberal arts from Allan Hancock College. We congratulate them.

If you or another employee you know has recently achieved this goal, we would like to hear about it. Just send the name, school, and degree(s) received to the *Weekly Log*, mail zone 11-1330.

Prepare for Great American Smokeout

Thursday, November 19, is the American Cancer Society's Great American Smokeout. On Wednesday, November 18, the Convair Recreation Association celebrates this annual event with a helium balloon release kickoff near the cafeterias at Kearny Mesa and Lindbergh Field between 11 a.m. and 1 p.m. Stop by and pick up a smoker's survival kit, receive blood pressure screening, and see how you can help make Thursday a smoke-free day.

Employee Survey Update

Many departments have addressed their employee survey communications issues by publishing department newsletters. For example, Finance's publication is *Finance Focus*. Published quarterly, it discusses topics such as accounting and financial system changes, objectives, training, employee survey feedback, organizational changes and promotions, upcoming events, and cost savings. We're pleased employee survey action is taking place. Watch for an upcoming edition of the *Weekly Log* featuring other employee survey feedback activities at Convair.

Peter Nguyen Receives \$300 Patent Award

Convair's Peter Nguyen, manufacturing engineer, recently had a patent application filed for his invention, the "Fastener Collar Removal Tool."

The tool removes round internally threaded collars from aerospace fasteners. It consists of a latching mechanism that grips the collar with metal "fingers." When the latch is released, the collar can be removed.

Although many tools are used for the removal of collars, there is a continuing need to improve them. Peter's invention is lightweight, requires little skill to use, and is small enough to reach cramped spaces. Possible damage to adjacent parts is reduced and time is saved.

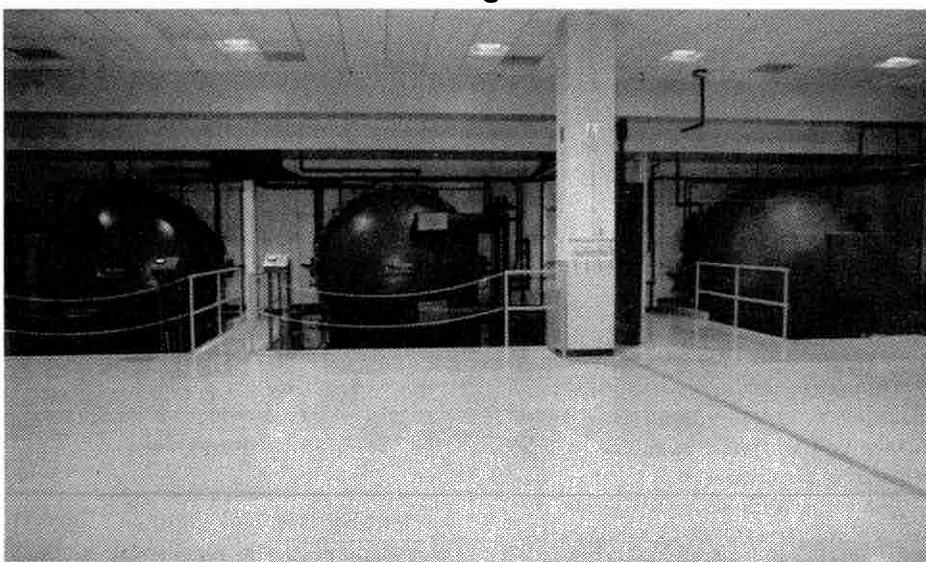
Peter received his \$300 award when the application was filed with the U.S. Patent Office.

Congratulations, Peter.

Employment

For the week ending November 6, Convair Division employment was 8,331; Space Systems Division employment was 2,967.

Autoclaves the Rave at Lindbergh Field



Over the past two years, four new autoclaves have been installed in the Advanced Programs' composite facility in Lindbergh Field's building 3. What's an autoclave and what does it do? An autoclave is a large tank that cures parts by heating to the desired temperature under the desired pressure. Although more sophisticated, it's similar to the process used to cure clay.

The first autoclave was installed to support detail cures of composite subassem-

blies. The others support cure cycles of final assemblies.

When an autoclave warms up, it really warms up. Three of the four units at Lindbergh Field cure at a maximum temperature of 650 degrees Fahrenheit under 200 pounds per square inch pressure. The other unit reaches temperatures up to 850 degrees Fahrenheit at the same pressure.

CONVAIR

WEEKLY LOG

November 23, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

Convair's Disaster Recovery Team Proves Ready for Action

On Thursday, November 19, Convair's disaster recovery team went into action during a mock drill. At 8:20 a.m. the Emergency Control Center received a call that a light plane had crashed into Kearny Mesa's building 5. Fire and smoke were everywhere. A minute later, ear-piercing alarms clued employees to evacuate the building. By 8:25 the building was cleared.

In the meantime, Convair's fire department arrived on the scene and the fire marshal set up an incident command post. By 8:35 the San Diego Fire Department, Hartson Ambulance Service and the Medical team arrived. Firemen entered the building while eleven triage stations were set up to aid the injured.

By 8:37 the incident commander received a report of seven casualties. These employees had suffered second and third degree burns and multiple fractures. They were rescued and taken to area hospitals (simulated). After another sweep of the building, three people were found dead.

An hour and twenty minutes had passed before the incident commander allowed the medical treatment center to close. The disaster was over.

This scenario was staged to see how Convair's disaster recovery team would re-

spond to a real emergency. The actors and key players were employees of building 5 and members of our fire, medical, security, transportation and safety departments. Members of the San Diego Fire Department, Hartson Ambulance Service, smoke screens, medical and rescue equipment and the bustle of activity added the realistic touch. How did our disaster recovery team perform?

San Diego Fire Battalion Chief Russ Lougy said, "In my opinion, it was an excellent drill. For Convair's first, I was very impressed with the expertise and familiarity of response procedures. Everything went smoothly."

After the drill, an evaluation session was held with everyone involved. A critique was later given by division staff members. George Roos, vice president Human Resources, said that communications could have been improved. Static, produced by too many radios on the same frequency, caused a number of garbled messages. Roos suggested that cordless phones be used instead of hand-held radios.

A special thanks is extended to everyone for their quick response, professionalism, and cooperation. See photos inside.

Employee Numbers Change to Six-Digit Figure

In order to supplement the nearly exhausted series of employee identification numbers, existing five-digit employee numbers become six-digit figures by adding a zero prefix, effective Saturday, November 28. All Convair and Space Systems files, systems and reports will utilize the new six-digit format.

The "check digit" formerly used at the end of the employee number will no longer be valid and has been omitted from time distribution cards, Convair forms and system information.

Systems installed within the past year, such as the new Convair On-Line Labor and Attendance Reporting Systems (COLLARS), are designed to accommodate the six-digit employee number. They continue to operate as before.

Division forms and reports are being revised to accommodate the new format. If you have forms that need revision, contact Forms Management (Convair — Kayanne Edmonds at 68704; Space Systems — Debbie Broyles at 77436).

If your department or group has access to any existing files containing employee numbers or generate ad-hoc reporting using this information, you may need to modify your programs to accept the six-digit format. For information regarding revised dataset names or modified file layouts, please call Jim Engle at 33340 or DSD Infonet at 33507. For information regarding labor files, contact Laura Berger (Convair) at 24693 or Art Wrightson (Space Systems) at 77804.

Telephone Sets Are General Dynamics Property

Convair and Space Systems Divisions have made a significant investment in modern telephone sets. Departments will not be charged for any telephone set that is reported stolen or missing as long as the department can prove that reasonable care was used to protect the set. However, whenever a telephone is missing, it is the department's responsibility to file a formal report with security. A replacement set will not be provided without a copy of the filed report.

In order to protect our investment, Convair and Space Systems will vigorously pursue any theft of a telephone set.



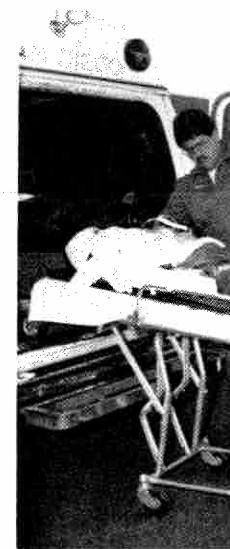
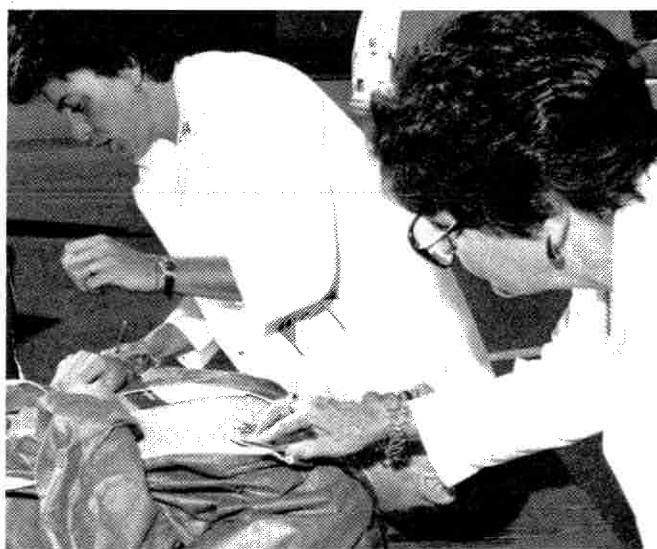
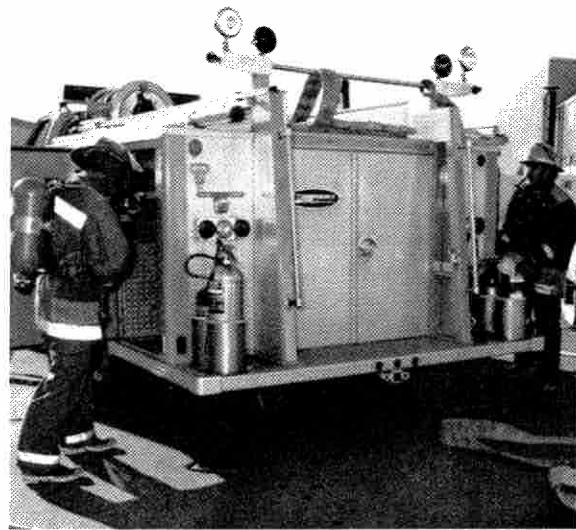
General Dynamics Donates Quarter Million to United Way/CHAD

On behalf of Convair, Space Systems, Electronics and Data Systems-Western Center, Convair's general manager John McSweeny recently presented a corporate gift of \$250,000 to the 1987 United Way/CHAD campaign. The gift is the largest to date and the second largest corporate con-

tribution ever to San Diego's United Way/CHAD drive.

McSweeny said, "This company gift, along with the gifts of thousands of employees through the Employees' Con-Trib Club, continues our long-standing tradition of supporting the San Diego Community."

November 19, 1987



11/23/87



Rudy Molina, vice president, Quality Assurance, kicks off the first statistical process control class.

Training Program for SPC Kicks Off

The first 20-hour statistical process control (SPC) class conducted by Terry Ralston, Educational Services, was recently held with a kickoff presentation by Ed Squires, division vice president, Cruise Missile Manufacturing Product Line, and Rudy Molina, vice president, Quality Assurance.

Fifteen employees made up the teams that began the first phase of a recently designed SPC course developed by Quality Assurance and Educational Services.

"SPC is the only way to go, and it will carry us into the twenty-first century," said Molina. "We are building pioneers who will change the way this company does business." According to Molina, SPC marks a quantum change in American industry.

Hugh Souder, chief, Technical Training, assisted in the development of the training program. Souder said, "Teaching the advantage of using an SPC approach to problem solving increases the understanding of processes and leads to continual process improvement."

Process action teams will learn to use basic statistical tools to provide quantified feedback about manufacturing processes. Additionally, problem-solving techniques will be integrated as part of the project design.

Additional training enhancements and techniques in charting and design of experiment modules are being developed for future SPC training. Incorporation of SPC techniques throughout applicable manufacturing areas, with initial emphasis at Lindbergh Field, will be accelerated.

Open Enrollment Ends November 30

The Safeguard Dental Plan will be discontinued on December 31, 1987. If you currently have coverage through this plan, you must change to another provider if you want dental coverage.

During open enrollment, you have the opportunity to change medical and/or dental plan options, but it must be done by November 30.

For your convenience, the Kearny Mesa benefits office is open Monday through Friday from 7-7:30 a.m. and from 11 a.m.-4 p.m. The Lindbergh Field office is open Monday, Wednesday, Thursday and Friday from 7-11 a.m. and from noon-3:30 p.m., and on Tuesday from noon to 3:30 p.m. At Plant 19, Employee Benefits is open Tuesday from 7-11 a.m.

Do You Know When You're Scheduled For System 85?

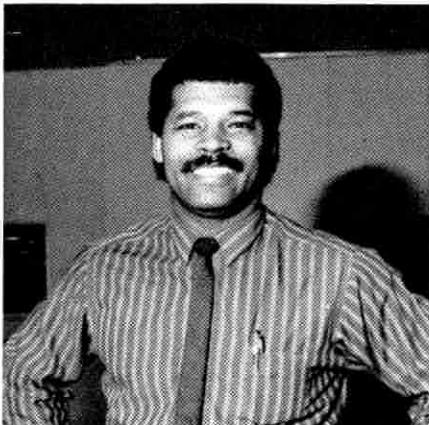
Training for the new System 85 Telephone system begins today and runs until December 11. If you don't know when your training is scheduled, please contact your department's telephone coordinator.

Oops!

Last week the *Weekly Log* requested that problems in the parking lots at Kearny Mesa and Lindbergh Field be reported to Industrial Security. The proper place to report such occurrences is the Emergency Control Center at Kearny Mesa (73100) or at Lindbergh Field (28244).

On the Spot

What do you like most about working at General Dynamics?



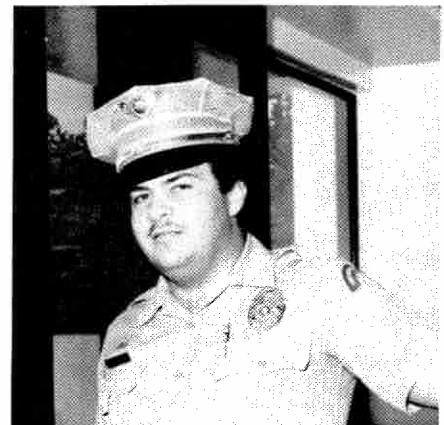
"General Dynamics is an equal opportunity employer. An ambitious person can move up the line. The opportunity here attracts me."

—Don Johnson
Operations



"The benefits. Tuition reimbursement is the only way to go. I know I'm going to be rewarded."

—Penny Anderson
Test Planning



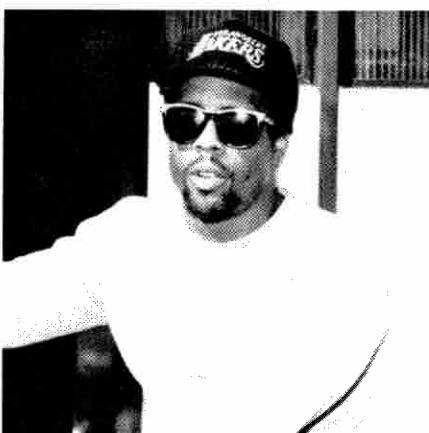
"Within a period of nine months I've seen progress in my career. Somewhere else it may have taken me two years."

—Frank Morales
Plant Protection Officer



"I feel good about being instrumental to the defense of our country."

—Linda Ritzheimer
Parts Release



"I like the way my coworkers treat me and the way everyone gets along."

—Terrence Smith
Maintenance



"I'm just very happy to work here. I have an interesting job and it's challenging."

—Phu Nguyen
Cruise Missile Mechanic

Editor's note: These employees were unexpectedly approached by members of the Weekly Log staff. We were so pleased with their spontaneous reactions and responses, we'll run this column periodically. Don't be surprised if you're the next person put On the Spot!

Bulletin Board

Convair Recreation Association once again offers hams to complement your holiday buffets. For \$18 you can buy a Krakus Polish seven-pound premium ham at the CRAs at Kearny Mesa and Lindbergh Field. Hurry by, supply is limited.

Mickey and Minnie Mouse will join employees in the Kearny Mesa cafeteria from 11 a.m. to 1 p.m. on Tuesday, December 1, to promote General Dynamics' Party at Disneyland. Anaheim's world renown amusement park will be open to GD employees from noon to midnight every Saturday and Sunday during the month of January.

Tickets, \$12.50 for adults and \$9.50 for children aged 3-11, will be on sale in the cafeteria during the two-hour promotional event. For more ticket information watch for soon-to-be-released fliers or call Jody at 28142.

The Old Globe Theatre has a special discount offer for General Dynamics employees for its 1988 season. "Holiday" opens December 10, "Joe Turner's Come and Gone" opens on February 4, and "Suds" opens March 31. Tickets for the series are as low as \$46.50 for matinees and \$57 for evening performances. For more information about the series, please see fliers at the lobby and gate entrances or call John Doty at 232-4199.

Happy Thanksgiving

Because of the Thanksgiving holiday the *Weekly Log* will not be published next week. We wish you and yours a safe and happy Thanksgiving.



Employment

For the week ending November 13, Convair Division employment was 8,325; Space Systems Division employment was 2,970.

CONVAIR

WEEKLY LOG

December 14, 1987

SPACE SYSTEMS

Published by General Dynamics Convair & Space Systems Divisions

NewsBriefs at Convair and Space Systems

Space Station Electrical Power Start Up Expected.

NASA announced the winners of the four Space Station Work Packages (WP). Rockwell's Rocketdyne Division secured WP4 for the development of the solar power electrical systems. As subcontractor to Rocketdyne, Space Systems will assist in the 20KHz power conditioning for the Space Station's electrical power. This effort is valued at \$149 million.

TAC Commander Receives Convair Quality Briefing.

Senior Convair management recently met with General Robert Russ, Commander, Tactical Air Command, to discuss Quality issues. The results were positive and mutually beneficial.

The Aeronautical Systems Division (ASD)

(ASD) conducted a semiannual security inspection last month of the Advanced Cruise Missile Program. The inspection was rated satisfactory, with an improvement over the last inspection.

CRAD and Magnet Contract Awarded.

The Superconducting Super Collider Central Design Group for the Department of Energy awarded a CRAD to Space Systems to perform a thermal parametric study of superconducting super collider Di-pole magnets. Also, Space Systems received a letter contract from SDIO and the Bechtel Corporation authorizing Space Systems to proceed with the development of a superconducting magnet program for use as an energy source in space.

Space Systems' Eng Receives Patent Award

Barry Eng recently had a patent application filed with the U.S. Patent Office for his invention entitled "System including a Portable Heat Gun for Curing Advanced Composite Workpieces."

With this invention a heat gun is used with a control system which regulates the temperature, the time that heat is applied and the distance from the workpiece.

In the past, manual curing resulted in costly scrapping of parts and schedule slippage. Now, with an automatic system, appropriate parameters can be preset to achieve reliability and consistency in the curing.

Barry received \$300 when the patent application was filed. Congratulations!



Operations Salutes Employees of The Month

"We personally feel that this program is a good program and sincerely want to recognize those employees who support the division and the Operations' department," said Ken Lake, vice president, Operations.

The program is Operations quarterly breakfasts, which salute respective employees of the month. This quarter, 28 employees were honored. Ken Lake and his staff joined the employees in the Executive Dining Room. After eating, staff members proudly recognized each recipient with superlatives to describe their accomplishments. Among the words that exemplified employees were "dedicated," "flexible," "team player," and "fine example of an excellent employee."

Lake reminded employees that we are faced with heavy competition. "They're just not giving away contracts. Only the strong will survive into the mid-90s," he said, "but Convair will survive because of the people in this room." He added that if we are going to compete in the future, we must be part of the team. We must build pride in ourselves.

Employees recognized during the fourth quarter were:

Manufacturing Engineering

Leeann Battista, Janie Blair, Orvil Linch,

George Wastila (Director – Jim Annis)

Procurement

Steve Lee, Walter Merrill, Darrel Drinan (Division VP – Russ Babcock)

Advanced Programs Mfg Product Line

M.L. Jones, Oscar Goco, David Scidmore (Director – Dave Cormany)

Manufacturing/Material Control Scheduling

Vicki Naish, Lin Majors, Debra Wilson (Director – Don Hannabarger)

Aircraft Programs Mfg Product Line

Mario Esquivel, George Felton, Mary Lou Sammarron (Director – Lou Imbimbo)

Fab & Production Engineering

Ted Stark, Stephen Doerr, William Galardi (Director – Norm Pearl)

Plant Services

Loretta Truman, Becky Wilson, Armando D'Orsi (Director – Jim Macoubrey)

CM Mfg Product Line

Edward Feddersen, Brett Hays, Kevin Gallagher (Division VP – Ed Squires)

Ops Administration

Craig Cutts, Jack Sinnott, Jim Forman (Director – Joe Stelmah)



Congratulations ACM Avionics and Test Team. The Advanced Cruise Missile Avionics Manufacturing and Test team at Kearny Mesa established a record for monthly completions during November as they transitioned from Full Scale Development (FSD) to Production. The successful completion of FSD has been the result of many months of frequent round-the-clock activity and personal dedication to the ACM Program. The combined efforts of the manufacturing and support teams clearly demonstrate that our people are the key to our

success. Members of the team are (first row, left to right) Sherelle Cofield, Bill Molloy, Gigi Ariate, Maria Bigorina, Rory Ibarra, Eloise Dunn, Martha Magee, Frances Dominguez, (second row, left to right) Menda Garcia, Anna Allison, Alice Bloxon, Diane Darby, Louella Williams, Glenis Aloia, Don Babbitt, John Balistreri, (third row, left to right) Charlie Brown, Al Lutze, Pedro Alarico, Richard Wagner, and Richard McGregor. Not available for photo were Raul Alves, Geoffrey Hill, Keith Johnson, Bob Kish, Henry Morley, Perri Tse.

GD Will Match You Dollar For Dollar

As the year end approaches, it's time to think about philanthropic giving to our favorite organizations. General Dynamics can double our contributions through its Matching Gifts Program.

The General Dynamics Matching Gifts Program has been expanded to stimulate increased giving by eligible participants to educational, cultural, youth and health organizations.

General Dynamics will match personal gifts of not less than \$25 nor more than \$5,000 actually made in any one calendar year to eligible organizations. Participants may contribute to as many such organizations as they wish, so long as the total of their gifts to be matched does not exceed \$5,000 in any calendar year.

Full-time active employees of General Dynamics and any U.S. division or subsidiary having one year of continuous service are eligible to participate.

This year, General Dynamics matched

more than \$25,000 to eligible organizations for Convair employees alone. Some organizations that benefited from the Matching Gifts Program were the Zoological Society, San Diego Museum of Art, Muscular Dystrophy Association and several universities throughout the country.

For more information on General Dynamics' Matching Gifts Program, pick up an application in the Community Relations office at Kearny Mesa.

We're Operating System 85

This past weekend, 11,000 telephone lines were installed for all employees at Convair and Space Systems Divisions to begin using the new System 85 telephone system today.

If you have any difficulty using the new system, please contact your departmental telephone coordinator. Other help line numbers are 38500 at Kearny Mesa and Century Park, 26365 at Lindbergh Field, Harbor Drive and Plant 19, and 38502 for all facilities if you have EM/OS log-on problems.

Security is Still Enforced During The Holidays

As the holiday season draws near, departments are planning holiday parties and exchanging gifts. Security regulations will be enforced as usual. Here are a few suggestions to make your holidays enjoyable.

- Plant Protection officers will randomly inspect wrapped presents. So packages won't have to be completely undone, wrap the box tops and bottoms separately to facilitate inspection.
- Office parties are permitted under company guidelines, but alcoholic beverages are not allowed on company property, including the parking lots. Alcoholic gifts are also prohibited.
- If you leave packages in your car, place them in the trunk or out of sight to discourage vandals.
- If you are planning to take a trip, please avoid bringing your packed motor home, van or automobile to work. Thieves would have a grand time but ruin your holiday.

12/14/87

See What's On Display In Building 2's Lobby

If you've gone through the Kearny Mesa building 2 lobby recently, no doubt you've seen a display center. Built by Fort Worth Division's display group, this value control display features major cost reduction programs throughout General Dynamics. It will be on exhibit until some time in January, and then it will be sent to another division.

Watch for New Entrance to Parking Lot 3

The Port of San Diego has completed a project to permit left turns at the intersection of Pacific Highway and Sassafrass Street adjacent to our Lindbergh Field facility. In order to install new traffic signals, it is necessary to relocate the entrance to employee

parking lot 3, which is at the northeast corner of Pacific Highway and Sassafrass Street.

The new driveway is approximately 20 feet east of the existing entrance. Beginning January 4, 1988, please use the new entrance. The old driveway will be inaccessible.

We're Proud of Our Graduates

Congratulations to **Joseph Ingoviaia** who received his bachelor's degree in business administration from National University; **Sally Evans**, who completed study at National University with a master's of business administration in computer information systems; and **Ricardo Pangan** and **Mike Paris** who earned their master's of business administration from National University.

Offset Vacation Program

The General Dynamics Offset Vacation Program ends on December 31, 1987. However, Percival Tours and World of Oz will continue to offer General Dynamics employees, retirees, and friends discounts on travel packages to the Orient and Turkey. Both travel agencies currently work with the Offset Vacation Program. Employees should call Percival Tours (for Orient tours) at (800) 527-8448 and World of Oz (for Turkey tours) at (800) 248-0234.

Personnel Hotline Numbers

Convair	39528
Space Systems	78990



(From left to right) Dick LeSage, Loral's vice president for Program Operations, and John Kanicsar, Loral's GLCM Shelter Manager, receive an appreciation plaque presented by Chuck Painter, Convair's GLCM

program director and Wayne Riner, Convair's GLCM Program Office Subcontracts Manager.

GLCM Reaches Major Milestone

The Ground Launched Cruise Missile (GLCM) Program reached a major milestone recently when the final launch control

Center Shelter was delivered to Convair by Loral Systems Group (formerly Goodyear Aerospace) in Phoenix, Arizona.

To mark the occasion, and in recognition of their support to the GLCM Pro-

gram, a plaque was presented to Loral. A total of 79 shelters were delivered by Loral. The first shelter was delivered to the GLCM communications subcontractor, GTE, in 1981.



Picnic in the Courtyard? In a continuing effort to improve facilities, the courtyard between columns Y10 and 13 in Kearny Mesa's building 4 has been refurbished. Enjoy the new area during your break or lunch period.

Ethics Reminder

The Ethics Program Director received a call from an employee on the Ethics hotline asking what she should do with a basket of fruit she received from a supplier. The caller knew that she could not accept the basket. She also knew that the Procurement department had recently sent letters to 8,000 vendors and suppliers reminding them of General Dynamics Standards and Business Conduct.

The Ethics Program Director said if you receive perishable gifts, send them to a non-profit group such as the Salvation Army, Children's Hospital or St. Vincent De Paul Center, where they can be distributed to those in need. Non-perishable gifts should be returned to the sender. A thank you letter should also be sent explaining our policy on accepting gifts and where you sent the gift.

For more information on the Gifts and Gratuities Standard, please call the Ethics hotline at 38120 (Convair) or 38367 (Space Systems).

The Mehurons Say Goodbye

The following is a heartfelt thank you and goodbye from Hildy and Joe Mehuron, who are retiring from General Dynamics this month. Hildy, staff secretary in ILS has been with the company 30 years. Joe, engineering specialist in Research & Engineering, has 27 years of service with General Dynamics.

"To our General Dynamics friends we say goodbye. To General Dynamics itself, we say thank you for all the opportunities we were given over the years and the exciting projects we worked on.

"We met at Convair, got married (more than 20 years ago) and shared the happy occasion with our coworkers at Convair. General Dynamics has not been just a company, it's been our family.

"To the people we worked with, that we laughed and cried with, so many of you wonderful people, we say we will miss you all. No one can take away the good memories.

"Now we look forward to enjoying another phase in our lives - retirement. So to all you, goodbye and thank you all for the years we shared together."

Configuration Management Overview

Configuration Management is a management discipline that is applied to virtually all projects at Convair. It is a key to successful product development and production.

Configuration Management provides techniques for managing the functional and physical characteristics of a product. It addresses preparation and control of specifications and drawings that describe a product's configuration.

If you would like to learn more about Configuration Management and overall Engineering operations, call Tom Samaras at 39412 to register for the next course.

Bulletin Board

The National Management Association's Convair, Space Systems and Electronics Division chapters are presenting a seminar featuring the videotape "A Passion for Excellence." The seminar is scheduled for Thursday, December 17, 4:30-6:30 p.m. in the MIC-RFTD conference room in building 26. Guest speakers include John Barrons, Ethics program director, Rudy Molina, vice president - Quality Assurance, and Vern David, Quality Assurance manager - Tomahawk Cruise Missile Program. For reservations call Andy Molnar at 73314 or Caroline Harbeck at 75743.

Disneyland will be open to General Dynamics employees from noon to midnight every Saturday and Sunday during January. Tickets cost \$12.50 for adults and \$9.50 for children aged 3-11. For more ticket information, call Jody at 28142. If you'd like to spend the night, Howard Johnson's Motor Lodge is giving a discount rate of \$48 per night. To make your reservations, call (800) 422-4228, and identify yourself with the General Dynamics party at Disneyland.

The Weekly Log is published by Human Resources for employees of General Dynamics Convair and Space Systems Divisions. If you have stories of interest, please call Pat Gayton, 39955, or send them to MZ 11-1330.

Managing Editor: Pat Gayton
Production Editor: Bob Trometter
Design/Layout: Bill Ferebee
Compositor: Dianna Rich

Employment

For the week ending November 27, Convair Division employment was 8,313; Space Systems Division employment was 3,014.



CONVAIR

WEEKLY LOG

December 23, 1987

SPACE SYSTEMS

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WE WANT TO KNOW

As most of you have heard, President Reagan and Soviet Leader Gorbachev recently signed the Intermediate-Range Nuclear Forces (INF) treaty, which has resulted in a Stop Work Order on our Ground Launched Cruise Missile (GLCM) programs. This agreement will undoubtedly cause a number of queries concerning the Treaty's details and impacts on our division. Some of you have also asked how this will affect us at General Dynamics. WE WANT TO KNOW will address some of these concerns.

Basically, some of the INF Treaty ground rules include:

- GLCM missile and transporter-erector-launcher (TEL) deliveries (DD-250) to cease immediately.
- All Ground Launched Cruise Missile (GLCM) unique missile activity to cease immediately.
- All TEL major and subassemblies activity be completed as specified by the United States Government.
- Convair will maintain a production capability until ratification to restart GLCM missile and TEL production.
- Launch Control Center (LCC) production continues.

We have compiled some questions asked by employees and provided answers to help you understand the situation.

Q. Is GD/Convair subject to inspection by USSR verification officials?

A. *Yes, periodic verification, but is limited, however, to AF Plant 19.*

Q. How will cessation of the GLCM programs affect GD/Convair and employment?

A. *The GLCM programs have been winding down. It will have minimal affect on employment at Convair.*

Q. Are the Sea Launched Cruise Missiles (SLCM) affected by the treaty?

A. *No. The Navy version contracts shall continue.*

Chuck Painter has been designated as the Convair Division point-of-contact for accepting and responding to INF queries. Please direct any questions you may have to Chuck at 25834.